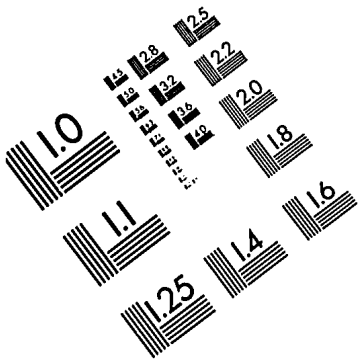
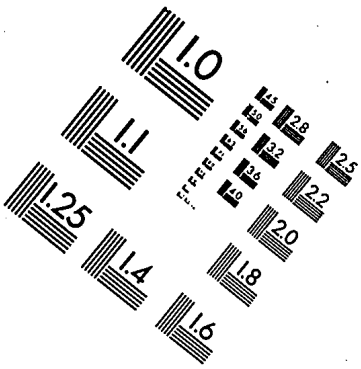
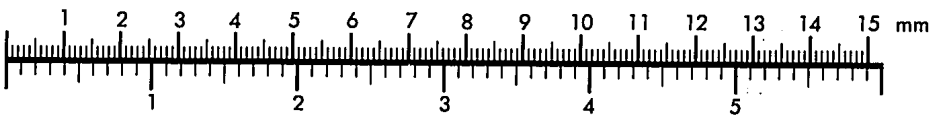


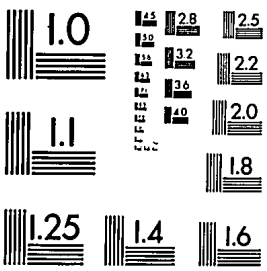
MS303-1980

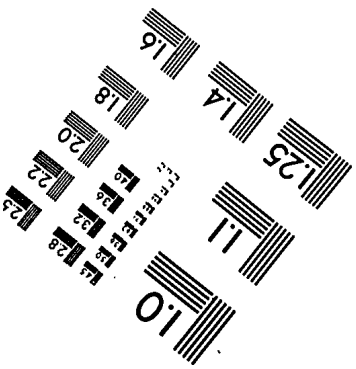


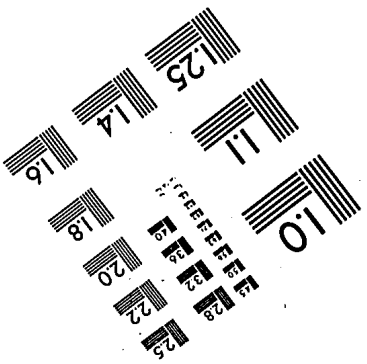
Centimeter



Inches







Thomas A. Edison Papers

A SELECTIVE MICROFILM EDITION

PART II
(1879–1886)

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at
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67

A Note on the Sources

The pages which have been filmed are the best copies available. Every technical effort possible has been made to ensure legibility.

THOMAS A. EDISON PAPERS

A SELECTIVE MICROFILM EDITION
PART II
(1879-1886)

REEL 67

DOCUMENT FILE SERIES (DOC-27)

D-83-031 through D-83-037
("Electric Light - Edison Electric Light Company of Europe, Ltd."
through "Electric Light - Foreign - Europe")

1883. Electric Light - Edison Electric Light Company of Europe, Ltd. (D-83-031)

This folder contains correspondence, reports, lists of stockholders, and other documents relating to the business of the Edison Electric Light Company of Europe, Ltd. Many of the documents concern the proposed formation of a general European light company to supersede existing companies. Related material can be found in D-83-037 (Electric Light - Foreign - Europe) and in the Primary Printed Collection (Company Records Series).

Approximately 70 percent of the documents have been filmed. The following categories of documents have not been filmed: routine company correspondence, such as letters relating to the shipment of goods; bills and receipts; bond coupons; bills of lading; duplicate copies of selected documents.

1883-01-03.

The Edison Electric Light Company of Europe Limited

65 Fifth Avenue New York January 3rd, *1883*

Dear Sir:-

A special meeting of the Directors of the Edison Electric Light Company of Europe, Limited, will be held at the office of Messrs. R. L. Cutting Jr. & Co., No. 19 William Street, New York City, on Friday, January 5th, 1883, at 1 o'clock P. M.

Yours truly,

S B Eaton

Second Vice President.

1883-01-06

Mr. Edison,

I have prepared a written statement of the present condition of the founders shares. I submitted it to the meeting of the European company yesterday, and had it incorporated in the minutes. The matter is so complicated, that if anything should happen to me a new man might not understand it, so I have written the whole story out. I enclose you a copy which you may be interested in reading. It is rather long but it could not be made much shorter.

The decision of the Directors of the European Company was to have all the founders shares brought over here, to tie them up in a Trust company in this city for 10 years, and to execute any reasonable agreement which the European company might require to that end. Also to do this no matter whether the remaining founders shares were tied up or not. Our Directors thought it was not worth while to ask Puskas & Bailey to tie up theirs, also Leon and others.

S. B. Eaton

Jan. 6th. 1883.

per Mc.G.

[ENCLOSURE]

Statement prepared by S. B. Eaton, Second Vice President, regarding the transfer of the company's founders shares from Paris to New York City, and submitted to the Directors of the European Co. at a meeting held January 5th. 1883.

FIRST. We have founders shares in three different companies, and directions have been heretofore given, as prescribed by the Board, for having all these founders shares sent to the office of the company in New York City. I have exchanged letters and cablegrams with Mr. Bailey and Mr. Batchelor, since Mr. Bailey's return to Paris, insisting that the founders shares in all these three companies should be at once sent here.

In reply to my request as above, a question has been raised touching a clause in the statutes of the Company Continentale. This question I will state at length below.

It relates to a certain portion of the parts of founder in the Company Continentale, namely, 20 per centum thereof. As soon as this question was raised, and it was claimed that this 20 per centum of the said founders shares in that Company could not, with safety to our interests, be forwarded to us, I requested Mr. Bailey to at once send the balance of the founders including those in all three of the Companies. That has not been done, and I judge from a cable from Mr. Bailey, received yesterday, that a new question has arisen, which must also be settled before any of the founders will be sent here. This also will be referred to below.

[ENCLOSURE]

Mr. Bailey states in his letter to me of December 20th., that Mr. Batchelor completed the preparation of the various receipts on December 19th., and that the delay still arising, touching the sending of the foundersshares to this city, relating only to the question of the 20 per centum, But in a letter from Mr. Bailey, dated December 23rd., just received, he renews a suggestion which he has frequently made before, and which he discussed with our Directors when he was here during the Summer, that all the points of founder, including the 20 per centum, should be deposited in a Trust Company, with an agreement, on the part of our Co., to hold them thus in deposit during the existence of the Compagnie Continentale. He does not state whether he thinks that Trust Co. should be a company on this side of the water, or in Paris. Possibly, I think, a Trust Co. in this city would answer as well as one in Paris. In that same letter Mr. Bailey states that the Directors of his Company were to meet that very afternoon to act upon my telegram of December 20th., insisting that the founders shares be sent here at once, even if Mr. Bailey thought it best to retain 20 per centum of the same in Paris; that at least the rest of them, aside from said 20 P.C. should be at once sent here.

Mr. Bailey still further states in his letter of December 23rd. that if the founders shares are sent here it will probably be necessary that, as a preliminary, a transfer should be made to the Company Continentale of the foundation Edison patents. Just what is meant by this I do not understand. All the patents

[ENCLOSURE]

have been already assigned to his Company, and I therefore do not understand what is meant. Yesterday I received a cable from Mr. Bailey as follows: "Company considers transfer of patents necessary. Am hastening all possible. Have written." I conclude from this cable that the transfer of patents which Mr. Bailey refers to in his letter of December 23rd., and which I have just mentioned, is a condition the Company Continentale seems to impose before letting the founders shares come to this side of the water. Consequently there seems to be just now two obstacles in the way of having the founders sent here: first, there is the question raised regarding the 20 per centum of the parts of founder of the Company Continentale; and, second, there is this new question, which I do not yet understand, and which Mr. Bailey cables yesterday he has written about, that seems to involve a condition precedent which must be performed on the part of our Company before our friends in Paris will allow the founders shares to be sent over here. What that condition precedent, thus to be performed by us, may be I do not know. It seems to relate to the transfer by our Company of certain fundamental patents on lamps, dynamos &c. A power of attorney was executed one year ago last December both by Mr. Edison and our Company to all the countries in Europe belonging to our Company, whereby these patents were transferred. So it is difficult for me to understand what this new point just raised is.

SECOND. What is this question of 20 per centum.

[ENCLOSURE]

The best way for me to reply to this question is to recite the facts as they have been developed in recent correspondence.

Mr. Bailey wrote me, December 6th., that Mr. Porges, in connection with delivering to our company the parts of founder, had called attention to a clause in the Fifth Article of the Statutes of the Company Continentale. That clause provides that we may object to any amalgamation of the Company Continentale with other companies, and to any cession or transfer of the assets or any part thereof, so long, and only so long, as our company continues to hold at least one fifth (20 per cent) of its Company Continentale founders shares. The language used in this connection in the translation of the statutes (it was made by Mr. Lawson) is that this veto power is thus given to us so long as we "nominally" hold at least said one fifth. But Mr. Bailey in his letter of December 6th. says that the word "nominally" is not a proper translation, and states that the French word really means "registered shareholders" The French word is "nominativement."

So long as we hold these founders shares, we can not only object to amalgamation, but we can also object to any contracts for the sale of territory, and to any licenses being made without our consent. This is provided for in the 6th. article of the contract of November 15th.

It would seem from Mr. Bailey's letters that the certificates of the parts of founders belonging to us had been made out to the order of "bearer". It would further seem that when it

[ENCLOSURE]

was proposed to change at least 20 per centum of those founders shares, and have them made out to the order of this company, instead of to bearer, even that did not satisfy Mr. Porges and his associates. It would further seem that what they demand is that this 20 per centum of these shares should be deposited in a Trust Co., even though they be made out to the order of this company, with directions to that Trust Company to collect the dividends and pay them to our company here; this deposit to continue as long as the Company Continentale exists, or until we are willing to forfeit the rights given us pursuant to the statutes of the contract above referred to. Mr. Bailey recommends in his letter of December 6th. that this 20 per centum of these shares should be thus deposited with the Banque Centrale, which is Mr. Porges' bank in Paris.

We have been of the opinion here in New York, that if it becomes necessary to place this 20 per centum of these shares in deposit, the deposit should be made in some Trust Co., here in New York city and not in Paris. We ought to have the founders shares here at home, where the headquarters of our company is. There are some very good reasons why this should be so, which I will not stop to give in this connection. Referring to this view of the matter Mr. Bailey states, in his letter of December 30th. that he thinks per haps Mr. Porges and associates would admit that the requirements of the case might be met if these shares were deposited in a Trust Company in New York city, instead of in Paris.

[ENCLOSURE]

provided a formal engagement be entered into by our company, properly legalized by the French consul, also by the Trust Company in this city, to give immediate advice to the Company Continentale in case we should at any time withdraw these parts of founder from the custody of the Trust Company. Mr. Bailey states that at the time he was writing that letter of December 20th. he was discussing with Mr. Porges the form of arrangement. I am in receipt of a letter from Mr. Bailey dated December 23rd., in which to my surprise, he makes no reference to what the result of the discussion touching such arrangement was. So I am in entire ignorance.

THIRD. In addition to this question of the 20 per centum of the founders shares in the Company Continentale, there is a collateral question raised, as to whether all of our founders shares, in all three of the companies, should not be tied up at least for say 10 years, by being deposited in a Trust Co. preferably in this city. Mr. Bailey argues very strongly in favor of this. He thinks it would give the shares of the company permanent value over there. He does not state whether the holders of the balance of the founders shares would be willing to place their shares in deposit in the same way. Probably they would not. Certainly Messrs. Puskas & Bailey would not, as they will probably need the money. That at any rate is a fair presumption.

Our European Light Co. here, has but one assett, these founders shares. It rests with the Board of Directors to sell these founders shares at any time. The power therefore rests

[ENCLOSURE]

with the Board by one simple stroke of business to dispose of the entire assets of our European company here. That power, even the possibility of its being exercised, tends no doubt to depreciate the value of the stock of our European company in this city. but if it is known that these assets are permanently tied up, by being deposited in a Trust Co. in this city, under a formal agreement executed with the Paris Co. the tendency would be to give confidence in the minds of the public to the shares of our company here. This is Mr Bailey's line of argument.

FOURTH. The questions now for our Board to decide are as follows:

FIRST. Shall we insist upon all the founders being sent here immediately save and except the 20 per centum of the Company Continentale.

SECOND. Regarding the said 20 per centum of the founders shares of the Company Continentale, shall we deposit them in a Trust Company in New York City (provided Mr Porges' point is insisted upon by himself and associates) or shall we deposit them in Paris?

THIRD. Shall we enter into an agreement, to which the Trust Co. shall be a party, that we will not withdraw the shars thus deposited during the continuation of the Company Continentale, without their consent? Or shall we reserve the right to withdraw them at any time, provided we are willing to sacrifice the rights conferred by the contract and statutes, so long as we hold these

[ENCLOSURE]

shares in our possession?

FOURTH. Shall our company put all the founders shares in escrow and execute an agreement to retain them in escrow for a certain number of years, as suggested by Mr. Bailey; and if we shall do so, for how many years shall it be?

No. 2.

RECEIVED from the Edison Electric Light Company of Europe, Limited, seven hundred and fifty (750) Parts of Founder in the Société Industrielle et Commerciale Edison; the said seven hundred and fifty (750) Parts of Founder being one quarter of the Parts of Founder issued to the said Edison Electric Light Company of Europe, Limited, under the terms of the Contract between said Company and ourselves, bearing date November 15, 1881. We further acknowledge that the said seven hundred and fifty (750) Parts of Founder are in full settlement of our Commission as promoters of the said Société Industrielle et Commerciale Edison as expressed in a letter signed by Messrs. Lowrey, Batchelor & Bailey, addressed to us, and dated November 15, 1881.

Dated, Paris, 6 février 1883.

Témoin
Courneau

Je déclare que je n'ai aucune reclamation à faire à la Edison Electric Light Co pour la part que j'ai prise à la formation de la Société Industrielle & Commerciale Edison

Paris le 6 février 1883
Charles Page

[ATTACHMENT]

No. 3.

RECEIVED from the Edison Electric Light Company of Europe, Limited, five hundred (500) Parts of Founder in the Societe Electrique Edison; the said five hundred (500) Parts of Founder being one sixth of the Parts of Founder issued to the said Edison Electric Light Company of Europe, Limited, under the terms of the Contract between said Company and ourselves, bearing date, November 15, 1881. We further acknowledge that the said five hundred (500) Parts of Founder are in full settlement of our Commission as promoters of the said Societe Electrique Edison as expressed in a letter signed by Messrs. Lowrey, Batchelor & Bailey, addressed to us, and dated November 15, 1881.

Dated, Paris, le 6 février 1882.

Témoin
Journaud

Je déclare que je n'ai aucune réclamation à faire à la Edison Electric Light C.y pour la part que j'ai prise à la formation de la Société Electrique Edison

Paris le 6 février 1882

Charles Bourgé

[ATTACHMENT]

Paris 15 novembre 1881

Monsieur Elie Léon Paris

En vertu des pouvoirs qui me sont donnés par M. Edison et par la Electric Light Company de New-York, je viens vous reconnaître les avantages suivants dans la formation des sociétés prévues par l'acte sous seings privés de ce jour, soit un dixième des parts de fondateur attribuées à M. Edison et à la Electric Light Company dans la société d'exploitation au capital de un million, – un sixième des parts de fondateur qui sont attribuées dans la société d'installations isolées en des villes au dessous de dix mille habitants, et un quart des parts de fondateur attribuées à M. Edison et à la Electric Company dans la société de fabrication.

Je vous autorise en conséquence et d'ores et déjà à retenir ces divers titres lors de la création de chacune des trois sociétés prévues.

Agréez monsieur mes salutations empressées

(Signé) Batchelor, Bailey

I approve of the above arrangement by
M. J. F. Bailey
(Signé) Lowrey

29

1883-02-24

The Edison Electric Illuminating
Company of New York. Harrington
65 Fifth Avenue

New York Feb 24th 1883

My Dear Insull

No letters for you. The following is a Cable dated Berlin 24th

"Cable what follows my name bailey national bank wilhelm strasse Berlin representing siemens halske zubzbach brothers Jacob landau and national Bank we hereby authorize Joshua J. Bailey sign contract with above persons on our behalf and will confirm signature by duly executed powers Thomas Alva Edison personally and President Edison Electric Light Company Europe Limited."

Truly Yours
C. E. Harrington

1883-03-21

The Edison Electric Light Company
of Europe Limited

65 Fifth Avenue New York March 21st, 1883.

T. A. Edison, Esq.

Dear Sir:-

Enclosed please find check for $28.54, which please place to the credit of Mr. Charles Batchelor, the same being to reimburse him for 2 Cablegrams sent to us relating to Founders shares, such cables amounting to 142.70 Francs.

I send the amount to you with the above request at the suggestion of Mr. Batchelor.

Very truly yours,

S. Wilson

Second Vice President.

Date of last Report, ... 18

Record of Transfers of EDISON ELECTRIC LIGHT CO. (of Europe Lim'd) Stock, by FARMERS' LOAN & TRUST CO., Transfer Agents at New York, for the Month Week ending March 31 1883.

STOCK SURRENDERED.				STOCK ISSUED.				
DATE OF SURRENDER.	NUMBER OF CERTIFICATE.	NUMBER OF SHARES.	IN WHOSE NAME.	DATE OF CERTIFICATE.	NUMBER OF CERTIFICATE.	NUMBER OF SHARES.	IN WHOSE NAME.	ADDRESS.
1883 Mch 1	220	1	Gustav Lafontaine	1883 Mch 1	715	1	S. Bergmann	
3	477	75	Geo. Louis Crouse Atty	3	718	5	Albert Kuehn	
					719	70	Geo. Louis Crouse	Bergheim Rd
5	717	33	J. W. Ord	5	720	10	J. G. Elliott	Elizabeth NJ
					721	23	John W. Ord	c/o J. G. Cross 18 Cm
6	307	160	E. P. Fabbri	6		160	Drexel Morgan & Co.	
		160	Drexel Morgan & Co		722/33 100	1200	F. S. Schlesinger	c/o Drexel M & Co.
					734	65	"	
					735/7 60	180	"	
					738/44 35	175	"	
					745/6 14	28	"	
					747	12	"	
					748	30	"	
8	724/6 100 ea	300	F. S. Schlesinger	8	749	60	John D. Upham	New York
					750	60	"	
					751/2 95 ea	190	"	
	721	23	John W. Ord		753	10	J. G. Elliott	
					754	5	J. F. Ritter	
					755	8	John W. Ord	
	737	60	F. S. Schlesinger		756	25	F. S. Schlesinger	
					757	12	"	
					758	23	"	
13	707	5	F. W. Ritter	13				
	720	10 / 3587	J. G. Elliott		759	3585/7	G. W. Baird	West Point Ky

Europe Light

Date of last Report, ... 18

Record of Transfers of EDISON ELECTRIC LIGHT CO. Stock, by FARMERS' LOAN & TRUST CO., Transfer Agents at New York, for the Week ending Mch 31 1883

STOCK SURRENDERED.				STOCK ISSUED.				
DATE OF SURRENDER.	NUMBER OF CERTIFICATE.	NUMBER OF SHARES.	IN WHOSE NAME.	DATE OF CERTIFICATE.	NUMBER OF CERTIFICATE.	NUMBER OF SHARES.	IN WHOSE NAME.	ADDRESS.
Forward		3887				3887		
1883 Mch 22	511	10	A Coddington	1883 Mch 22	760	10	A. Wallenstein	N.Y.
		3897				3897		

1883-04-03

The Edison Electric Light Company of Europe Limited

65 Fifth Avenue New York April 3rd, *1883*

T. A. Edison, Esq.

City.

Dear Sir:

A special meeting of the Directors of the Edison Electric Light Company of Europe, Limited, will be held on Thursday April 5th, at one o'clock P. M., at the office of Messrs. R. L. Cutting, Jr. & Co., 19 William Street, for the purpose of confirming the contracts heretofore executed in our behalf by Mr. J. F. Bailey with the Germany Company and Messrs. Siemens & Halske. Inasmuch as we have only 30 days from the date at which the contracts were executed in Berlin (March 13th.) to ratify the same it is necessary to close up this matter at once. You are, therefore, earnestly invited to be present at the above meeting.

Very truly yours,

Wm H Meadowcroft

Secretary.

The Edison Electric Light Company
of Europe Limited

65 Fifth Avenue: New York April 16th, 1883.

Dear Sir:-

A special meeting of the Directors of the Edison Electric Light Company of Europe, Limited, will be held at the office of Messrs. R. L. Cutting, Jr. & Co., 19 William Street, New York City, on Wednesday, April 18th, 1883, at 1 o'clock P. M. for the purpose of discussing means for raising the money to pay the interest, due May 1st, on the Debenture Bonds issued by this Company,; also to fix the compensation of Major S. B. Eaton, Second Vice President and General Manager.

Yours truly,

Wm H Meadowcroft

Secretary.

By order of

The President.

(over)

Mailed copies of within to T. A. Edison, 65 Fifth avenue, F. W. Foote, 59 Wall St., R. L. Cutting, 19 William St., James H. Banker, 19 William St., all N. Y. City, also to James H. Banker, Irvington, N. Y. & handed copy to S. B. Paton personally acc on April 16/83. W.H.M.

The Edison Electric Light Company
of Europe Limited

65 Fifth Avenue New York April 18th 1883.

Mr. W. H. Meadowcroft, Secty.
City.

Dear Sir:

I hereby accept the terms agreed upon at the meeting of the Directors of The Edison Electric Light Company of Europe, Limited, this day, touching my compensation from April 16th 1881 to January 1st 1888, as follows:

(1). The terms stated in my two letters addressed to Mr. Bawker, dated August 28th 1882 and November 21st 1882.

(2) The maximum compensation not to amount to more than $7200 per annum on an average for the time specified covering this agreement.

(3) The arrangement to be binding on both the company and myself until the termination of the period named, namely, January 1st 1888.

(4) My commission is not to apply to the founders shares in the three French companies heretofore received by this company.

Very truly yours,

J. B. Walker

1883-04-18

The Edison Electric Light Company
of Europe Limited

65 Fifth Avenue New York Apr 18 1883

T. A. Edison Esq.

Dear Sir -

I believe my compensation will be fixed by the European Co. to-day, so I put on record, for your personal files, this statement - similar to the one I have filed with you touching the Oil Milling Co. - that whenever I receive any compensation for the European Co. I shall pay you such proportion of it as your stock, personally held by yourself, bears to the whole stock. In other words, I shall take no pay from you - that comes even indirectly out of your pocket - because I

1883-04-18

Electric Light Company
Europe Limited

65 Fifth Avenue, New York 188

Consider that the stock received from you is all the compensation I am entitled to, so far as you personally are concerned.

I put this in writing in order to avoid any misunderstanding in future, especially in the event of my death.

Very truly yours

S. B. Salom

1883-04-23

Edison Electric Light Co. of Europe Limited.

Abbey Edward W.	3
Ayres Jane L.	5
Albinola C.	5
Alsop Henry W.	14
" Mrs. Sadie D.	3
Abbott Miss Ida J.	6
Banker James H.	3333
Barker Geo. F.	25
Bass Edgar W.	25
Bailey Floyd	35
" Latimer	50
" Eliza F.	5
Batchelor Chas.	854
Brant John	3
Bathwell Chas.	10
Bergman S.	26
Bunker Samuel	190
Carman William	60
" G.	4
" C. P.	6
Clarke Chas. L.	20
Langmann Chas L	3
Chase Higginson	10
Castelbolognesi Jacques	13
Cesqua A.	5
Crowell Eugene	25
Coles H.	5
Cox Kenyon	25
Colby A.	24
510	

1883-04-23

2. 1

Forward.	4792.
Coe J. L. Jr.	2
Congdon A. W.	1
" Geo. E.	9
Coddington Herbert	100.
Cutting R. L.	315
" William	25
" R. L. Jr	350
" W. L.	175.
Cunningham Mrs Mary E.	1.
Curtiss John W.	1.
dex Nickas Francis	400.
Dearing James	10.
Divine Michael M.	5.
Dodson R. D.	5.
Dixon Thomas A.	6064.
Earl Wm H.	14.
Eaton S. R.	55.
Elliott J. E.	20.
Faber Alfred	5.
Fairman J. J.	10.
Fish James L.	10.
Forbes Jno E.	1.
Foote Frank W.	20.
Garner Wm N.	1.
Greene Gardiner	10.
Griffin S. L.	1702.
56	

3.

1883-04-23

Forward	1403.
Gildersleeve W. H.	170.
Gostenhofer F. E.	3
Godfray	2
Goddard Calvin	5
Gower Geo. Levin	70.
" " " Atty	300.
" " " " for F. A. Gower	1150.
Harland Thomas	150
Heggewisch A.	40.
Holgate A. J.	4.
Hunt A. C.	5.
Jaffray Robt Jr.	1
" Mrs Lydia Dutton	1
Jaques W. L.	35.
Jenbie N. T.	9.
Jeff Francis	3.
Johnston L. C.	30.
Jones F. M.	9.
Johnston F. M. Jr.	7.
Johnson Edward N.	15.
" Chas N. Jr.	5.
Judson Newton	2
Insull Saml	40.
Krycoi John	20.
King Chas M.	3.
Kitson Arthur	7.
Knight Geo W.	3.

1883-04-23

24.

Howard		1883.
Krohn Albert	✓	5.
Ladd Maudy G.	✓	2.
Lancaster Chas. D.	✓	5.
Lener Oscar	✓	20.
Livingston Newman	✓	1.
McLaughlin Frank	✓	155.
McKeson G. C.	✓	2
Meadowcroft W. H.	✓	1.
McLean T.	✓	2
Miller & Peck	✓	200.
McGinnis John Jr	✓	5.
McGinnis R. M.	✓	91.
Miller F. G.	✓	500.
McGinnis Eugene	✓	10.
Mott Saml. L.	✓	10.
Moore N. H.	✓	5.
Moser Otto A.	✓	45.
Morgan T. N.	✓	3
Moore M. F.	✓	5.
Moller Geo.	✓	11
Mott Chas. D.	✓	2.
Nickerson J. N.	✓	5.
Norris Mrs Mary R.	✓	1.
Ord John W.	✓	8.
	36	15587

1883-04-23

Forward	15587.
Parsons Levi	10.
Paul Jas M. Jr.	1.
Pelton Guy R.	19.
Perry W. S.	228.
Peacock Mrs C. B.	3.
Porter John K.	10.
Pickard Theodore	190.
Sapportas	167
Pulaston J. M.	25
Randolph Margaret A	2.
Richmond James	10.
Rogers W. S.	5
Rousseau Constant	500.
Sapportas A. J.	8
Sampson W. L.	103.
Shepard C. H.	1.
Schlesinger F. S.	1367.
Smith Foster S.	2
" Peter V.	1.
Mortimer F.	3.
Smithers Mrs Louisa W.	4.
Gilleck Geo N.	3.
Schroder Chas.	2
Storm Henry	2
Scott Geo S. & Co.	40.
Soren Geo W.	10.
Squires C. W.	5
58	18308

6.

1883-04-23

Forward	18308
Thomas Geo. C	17.
Upham John B.	300.
Unger Chas. A Co.	2.
Upton F. R.	300.
Von Hoffman L. A Co.	150
Watjen Louis	110.
" Fred A Co.	45
Walton Jaud	1.
Warren Schuyler A Co.	500.
Walferstein H.	242
Whiting Miss Kate A.	10.
" Bradford A.	10
" Samantha	5.
	20000.

Office of the Farmers Loan & Trust Co.
36 and 38 William St. N.Y. Apr. 25th '83
I hereby certify the foregoing to be a true and correct list of the stockholders of the Edison Electric Light Company of Europe, Limited, and their respective holdings at the close of business on April 23rd 1883.

N. W. Buckley
Transfer Clerk.

April 25th 3.

R. L. Cutting, Jr., Esq
Treasurer.

Dear Sir:

At a meeting of the Board of Directors of this Company, held April 5th last, it was resolved that the receipt of the Central Safe Deposit Company of New York for the box containing our Parts of Founder in the Société Electrique Edison and the Société Industrielle et Commerciale Edison should be handed to you, as Treasurer of the Company, for safe keeping.

Enclosed herewith I now beg to hand you such receipt, in pursuance of such resolution.

Will you kindly write me in acknowledgment thereof.

Very truly yours,

Second Vice President.

1883-152

PROXY.

W. Reid Gould, Law Blank Publisher and Stationer, 168 Nassau St. N. Y.

Know all Men by these Presents, That

I, James H. Banker, of Irvington, N. Y.

do hereby constitute and appoint S. B. Eaton

Attorney and Agent for me and in my name, place and stead, to vote as my proxy at ~~any~~ the annual election of directors of the Edison Electric Light Co. of Europe, Limited, to be held May 2d, 1883

according to the number of votes I should be entitled to vote if then personally present.

In Witness whereof, I have hereunto set my hand and seal this thirtieth day of April one thousand eight hundred and eighty three.

Sealed and delivered in the presence of

Wm H Meadowcroft

James H Banker

Date of last Report, Apr 1st 1883

Record of Transfers of EDISON ELECTRIC LIGHT CO. Stock, by FARMERS' LOAN & TRUST CO., Transfer Agents at New York, for the Week ending May 1st 1883

STOCK SURRENDERED.				STOCK ISSUED.				
DATE OF SURRENDER.	NUMBER OF CERTIFICATE.	NUMBER OF SHARES.	IN WHOSE NAME.	DATE OF CERTIFICATE.	NUMBER OF CERTIFICATE.	NUMBER OF SHARES.	IN WHOSE NAME.	ADDRESS.
Apr 1883 3	758	23	F. J. Schlesinger	Apr 1883 3	761 cam.	3	W. L. Samson	Dust Morgan & C
					762	2	Ed Godfrey	"
					3	1	J. K. Paul Jr	Dust & C. Phila
					4	1	Geo Thomas	do
					5/6	17		
		23				23		

Proxy. H. Anstice & Co., Stationers, 93 Nassau St., N. Y. 1883-05-01

Know all Men by these Presents,

That I Thomas A. Edison

do hereby constitute and appoint Samuel Insull failing whom S. B. Eaton

Attorney and Agent for me, and in my name, place and stead, to vote as my proxy at the Annual ~~election of~~ meeting of the Edison Electric Light Co of Europe to be held on 2nd day of May 1883

according to the number of votes I should be entitled to vote, if then personally present.

In Witness whereof, I have hereunto set my hand and seal, this 1 day of May one thousand eight hundred and eighty three

Sealed and Delivered in the Presence of

S. Bergmann. Thos A Edison

PROXY. W. Reid Gould, Law Blank Publisher and Stationer, 168 Nassau St. N. Y.

Know all Men by these Presents, That

I, Charles Batchelor

do hereby constitute and appoint Samuel Insull failing whom S. B. Eaton

Attorney and Agent for me and in my name, place and stead, to vote as my proxy at ~~any election~~ the annual meeting of the Edison Electric Light Company of Europe to be held on 2nd day of May 1883

according to the number of votes I should be entitled to vote if then personally present.

In Witness whereof, I have hereunto set my hand and seal this 1 day of May one thousand eight hundred and eighty three

Sealed and delivered in the presence of

S. Johnson Chas Batchelor

1883-05-02

A

State of New York :
: ss:
City and County of New York :

Edward E. Davidson and F. McGowan being sererally duly sworn, each for himself, says: that he will discharge with fidelity the duties of his office as Inspectors of election of Directors of the Edison Electric Light Company of Europe, Limited, at the annual meeting of the stockholders of said Company held this 2nd, day of May, 1883; that he will not receive any vote but such as he believes to be legal, nor reject any vote which he believes to be legal.

Subscribed and Sworn to
before me this 2nd, day
of May, 1883.

Wm H. Meadowcroft
Notary public
N.Y. Co.

F. McGowan.
Edward E. Davidson

1883-05-02.

C

State of New York, :
: ss:
City and County of New York :

We, Edward E. Davidson and F. McGowan, the Inspectors of the election of Directors had at the annual meeting of the stockholders of The Edison Electric Light Company of Europe, Limited, held this 2nd, day of May, 1883, hereby report that having first taken and subscribed the oath hereto annexed, we entered upon the duties of our office as such Inspectors as aforesaid; that on the closing of the polls we canvassed and counted the votes cast, and find that there was present at such meeting, in person or by proxy, holders of Ten thousand two hundred and fifty three shares of the Capital stock of the said Company; that there were cast at such election Ten thousand two hundred and fifty three (10,253) votes; and that all of them were cast for the following named persons as Directors for the ensuing year, namely: Thomas A. Edison, James H. Banker, Robert L. Cutting, Frederick W. Foote, and S. B. Eaton.

Dated May 2nd, 1883.

F. McGowan
Edward E. Davidson

1883-05-02

Edison Electric Light Co
of Europe Limited

Annual Meeting May 2/83

For Directors

T. A. Edison
S. B. Eaton
F. W. Foote
R. L. Cutting
James H. Bauker

I vote the above ticket for James H. Bauker 3333 shares, T. A. Edison 6064 shares & Charles Batchelor 854 shares

T. A. Edison

1883-05-02

Edison Electric Light Co of Europe, Limited.

Annual meeting May 2/83

For Directors

Thos. A. Edison
S. B. Eaton
F. W. Foote
R. L. Cutting
James H Banker

I vote this ticket for
W. H. Meadowcroft

188(3)-05-02

The Edison Electric Light Company of Europe Limited.

65 Fifth Avenue New York May 2nd. *188*

T. A. Edison, Esq.

City.

Dear Sir:-

Enclosed please find copy of annual report this day submitted at the annual meeting of the stockholders of this Company, which I beg to hand you for your files.

Very truly yours,

S B Eaton

[ENCLOSURE]

(1883)

REPORT OF THE BOARD OF DIRECTORS TO THE STOCKHOLDERS OF THE EDISON ELECTRIC LIGHT COMPANY OF EUROPE, LIMITED.

Since the report made to you at your last meeting, May 3rd, 1882, many important subjects which we will briefly enumerate below, have received our attention.

Several matters of great importance to the Company were adjusted last Autumn, during the visit of Mr. J. F. Bailey, one of our representatives at Paris, to this Country. We refer principally to certain proposed amendments to the Contract of November 15, 1881, with the Paris Syndicate, also the disposition of the Founders shares, and the payment of the Commission of five per centum of the Founders shares to Messrs. Puskas & Bailey for their services.

In regard to the Founders shares coming to this Company, namely, 8000 founders shares in the Compagnie Continentale Edison; 3000 founders shares in the Societe Industrielle et Commerciale Edison; and 3000 founders shares in the Societe Electrique Edison there have been some divisions of the same since the last annual report, which may be mentioned here. Without going into minute detail in regard to the same, it may suffice to say that the following is the final division of our proportion of these shares, namely:

In the Compagnie Continentale we were entitled to 8000

[ENCLOSURE]

(1883)

parts of founder, which have been divided as follows:

One tenth to the Paris Syndicate.....	800	shares.
To Mr. E. Leon for services.....	70	"
Puskas & Bailey, 5 per centum for services.....	356	"
Balance to this Company.....	6,774	"
Total.....	8,000	"

These 6774 shares entitle our Company to 67 3/4 per cent of the net profits of this Company.

In the Societe Industrielle, the Manufacturing Company, we received 3000 founders shares, divided as follows:

To the Paris Syndicate.....	750	Shares.
To Puskas & Bailey for services.....	112	"
Balance to this Company.....	2,138	"
Total.....	3,000	"

These 2138 shares entitle us to about 35 1/2 per centum of the net profits of this Company.

In the Societe Electrique, o[illegible]lated Company, we had 3000 founders shares, which are divided as follows:

To the Paris Syndicate.....	500	shares.
To Puskas & Bailey for services.....	125	
Balance to this Company.....	2,375	"
Total.....	3,000	"

Our share therefore in the profits of this Company will

[ENCLOSURE]

(1883)

be about 47 1/2 per cent.

We have recently received from Paris our 2138 parts of founder of the Societe Industrielle, and 2375 parts of founder of the Societe Electrique. These shares are represented by certificates for one share each, payable to bearer, and after being carefully counted they were deposited by the Treasurer of the Company in the custody of the Central Safe Deposit Company of the City of New York, where they now are.

We have not, however, yet received our proportion of the founders shares in the Compagnie Continentale. The reasons for this briefly stated, are as follows:

Under the contract with the Paris Syndicate of November 15th, 1881, and under the articles of association thereunder, this Company is entitled to veto any proposition for selling out the European Companies to any other interest, also to veto any proposition to amalgamate or consolidate with any other company or companies; also to refuse to ratify any contract made by the Compagnie Continentale Edison with other countries. In order, however, to exercise these privileges this Company must be the owner of Twenty per cent of the founders shares attributed to it by the Compagnie Continentale Edison. The point is made by that Company that, inasmuch as these founders shares are made payable to bearer, they would have no assurance that we were still the owners of the requisite percentage if all the founders shares were sent over here. They have requested that we shall deposit the Twenty

(1883)

per cent of such founders shares in a bank or trust company in Paris in our name, thus affording the Compagnie Continentale positive assurance that we were the owners of such shares. This your Board think would not be advisable. We think that as the headquarters of the Company are here all the founders shares should be kept here in the Company's own custody. Much correspondence has passed between the Paris Company and ourselves on this subject, and our offer to deposit the Twenty per centum in a trust company in this City under certain quarantees that it could not be withdrawn, has so far been declined, and their suggestion to deposit the Twenty per centum in Paris and send the remainder on here has been renewed by them. Your Board has, however, recently directed the Second Vice President, Major Eaton, to communicate directly with Mr. Porges, the President of the Compagnie Continentale, and suggest to him that he himself name the Bank or Trust Company in New York in which he would be satisfied to have the founders shares deposited, with stringent restrictions upon their withdrawal. No answer has as yet been received to this proposition, but we trust it will meet with his acceptance, and the shares will all be sent here.

Early in June of last year preliminary contracts relating to the formation of both a German Company and an Italian Company were sent to us for approval, and after considerable discussion the same were approved. These contracts provided merely for the formation of preliminary companies for the exploitation

[ENCLOSURE]

(1883)

of the Edison patents in Germany and Italy, but since that time a permanent Company for Germany has been organized. Mr. Bailey has recently spent two months in Berlin in the negotiations for this last named Company, and, in addition, in arranging for a consolidation of the Edison interests with Messrs. Siemens & Halske, the well known electrical manufacturers in Germany. The final contracts between the German Syndicate, Messrs. Siemens & Halske, The Compagnie Continentale Edison, the Societe Electrique Edison, and this Company were formally executed in Berlin on March 13th., and formally ratified and confirmed by this Company in this City on April 7th. 1883.

This German contract is practically made between the Compagnie Continentale Edison, as our assignees of our patent rights for Europe, and the German Company and Messrs. Siemens & Halske, the only purpose for which our Company was made a party to the contracts being to have our formal ratification thereof in writing. The Company Continentale Edison therefore receives the considerations mentioned in the contracts and we ultimately get our portion thereof by virtue of the founders shares above mentioned. The considerations given by the German Company and Messrs. Siemens & Halske are as follows: The German Company pays the Compagnie Continentale $80,000 at once. It also pays a royalty, whenever a plant is installed of three dollars per horse-power for isolated plants and four dollars per horse-power for central Station plants; besides a royalty of six cents on every lamp. The

(1883)

Compagnie Continentale also receives founders shares which entitle it to about twenty per centum of the profits of the German Company. Siemens & Halske pay the following royalties on all installations made by them: Whenever they make an installation, they pay six dollars per horse-power on isolated plants and eight dollars per horse-power on central station plants; besides a royalty of twelve American cents per lamp.

From a careful reading and consideration of these contracts and from all the information we can obtain from abroad, your Board has every reason to believe that these German contracts are the best obtainable in that country, and that, on the whole, they will prove with the consolidation of the Siemens and Edison interests, very beneficial to all concerned.

No permanent Italian Company has as yet been formed. The contract with the Italian Syndicate above spoken of provides that said Syndicate shall organize a Company of 3,000,000 francs, of which half was to be used for manufacturing, and the other half for the exploitation of central station systems. This Company was to exist at least a year, if at the end of the year it does not renounce its rights, it is to be continued for 49 years longer. Should the Italian Company be determined at the end of the first year the Paris Companies recover their full rights to the Italian patents. If the Italian Company is continued for 50 years, the profits of manufacturing and isolated business is to be divided equally between the Italian Company and the Paris Com-

[ENCLOSURE]

(1883)

pany. In the same event the Paris Company receives 1/4 of the capital and all increases thereof of any sub-company organized for central station lighting in Italy.

Considerable progress has been made by the Societe Electrique in the installation of isolated plants throughout the various countries of Europe. These installations were given in detail in the Sixteenth Bulletin issued by the Edison Electric Light Company, New York City, copies of which were sent to all Stockholders of this Company. At the date of that Bulletin, February 2nd. 1883, these European installations numbered 108, with an aggregate of 19, 536 lamps. Since that time many additional installations have been made, and others are now in progress of completion. These plants we are informed are giving entire satisfaction and many of them have been largely increased. For instance, an installation of 60 lamps was made for Finlayson, & Co. Tammerfors, Finland, which has been increased to 650 lights, and an installation in the Railway Depot at Strasbourg, which has been increased fron 60 to 1200 lights. Several Central Stations are also in progress of erection, among which we may mention a Station of 5000 lights in Milan, one of 1000 lights in Rotterdam and one of 1000 lights in St. Petersburg.

The factory for the Societe Industrielle, which was mentioned in the last report as having been bought, has since been fully stocked with machinery and tools, and is now manufacturing not only dynamos and lamps, but most of the other apparatus used

[ENCLOSURE]

in installing Edison plants. This factory is in charge of Mr. Batchelor, who has frequently been complimented upon its unusual completeness and high state of efficiency.

Important negotiations for exploiting our business on a large scale are now going on in Paris and London. It is not the province of your Directors to make predictions as to what will grow out of these negotiations, but it may be proper for us to state that the indications are favorable for procuring large amounts of capital to develop the business, especially that of Central Station lighting, on a large scale during the next year.

In concluding this Report, your Board desire to present their congratulations upon the progress made since the last annual meeting, and upon the bright prospects for the future.

1883-05-18

RECEIVED
MAY 19 1883
ANSWERED

FILE No. 1883

The Edison Electric Light Company of Europe Limited

65 Fifth Avenue, New York May 18th. 1883

Dear Sir:-

A meeting of the Directors of the Edison Electric Light Company of Europe, Limited, will be held at the office of Messrs. R. L. Cutting, Jr. & Co., 19 William Street, New York City, on Monday, May 21st., at one o'clock P. M. for the purposes of organization, and also for the purpose of passing a formal ratification of the Italian Contract which was confirmed by the Board June 9th. 1882.

Yours truly,

Wm Meadowcroft

Secretary.

July 5, 1883

Receipt of Puskas & Bailey for all Parts of Founder

N° 6

We hereby acknowledge to have received from The Edison Electric Light Company of Europe, Limited, one hundred and twelve parts of Founder of the Société Industrielle & Commerciale Edison, the same being five per cent of the Parts of Founder issued to said New York Company after deducting one quarter thereof for the commission to Mr Léon.

We also acknowledge to have received from the said Edison Electric Light Company of Europe, Limited, one hundred and twenty five Parts of Founder of the Société Electrique Edison the same being five per cent of the Parts of Founder issued to said New York Company after the deduction of one sixth thereof for the commission of Mr Léon.

We also acknowledge to have received from the said Edison Electric Light Company of Europe, Limited, Three hundred and fifty six Parts of Founder of the Compagnie Continentale Edison, the same being five per cent of the Parts of Founder issued to the said New York Company after the deduction of one tenth thereof for the commission of Mr Léon, and after deducting the seventy shares given to Mr Léon.

We further acknowledge that the

above named Parts of Founder are assigned to and accepted by us, in accordance with the terms of a certain agreement made between ourselves and the said Edison Electric Light Company of Europe, Limited, dated August 26th, 1882, as full compensation for past and future services and disbursements in behalf of said Edison Electric Light Company of Europe, Limited, and in consideration of such Parts of Founder we hereby jointly and severally release the said Edison Electric Light Company of Europe Limited, and Thomas A. Edison individually, from any and all claim and demands of every kind whatsoever from the beginning of the world until the present day.

As witness our hands and seals at the city of Paris this fifth day of July 1883.

For Théodore Puskas
In the presence of
A Bequet

Théo. Puskas

For J. F. Bailey
in the presence of
G Colombo
Milan 7th of July 1883

J. F. Bailey.

1883-08-04

CUNARD·ROYAL·MAIL·STEAM·SHIP·

Servia

Aug 4/83

My dear Edison

I expected to have returned to Newyork by this ship, but am prevented at the last moment by a matter of business which makes it necessary for me to return to Vienna - My family go home & I am accompanying them to Queenstown from whence I return to London & thence to Vienna. I hope not to be detained here more than two or three weeks & shall sail

for home as soon as the matter referred to can be settled. You will have heard through Johnson or otherwise of the Railroad endeavors to form a new General Company for Europe; meantime overtures have been made by two of the largest financial concerns in Vienna to acquire the Edison rights in Europe, and I am now advised that they are quite ready to take the matter in hand. I have not time to enter into particulars but suffice it to say that I have had sufficient evidence to satisfy me there is enough in it to

make it worth my while to remain & take the long journey to Vienna - I told Johnson something of this in Paris & he will be able to give you more details than I can write. I think it just as well, probably better, to say nothing of this to Eaton or anyone in interest in N.Y. until I have been to Vienna and found out what the prospects are - but I wanted you personally to know what is keeping me here beyond the time at which I intended to return - I just happened to say to my wife in the hearing of Mrs Dr Austin Flint who is on board that I was going to write to you, when she

said "tell him from me that I bless him every day of my life for Polyphemus"

I'll keep you posted as to progress of this affair and there may be a chance to make something out of European Co Stock - if there is I will give you the first news & you must put me in for some -

Yours truly

C. Goddard

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ELECTRICITÉ

Grand Diplôme d'honneur

PARIS 1881

Ivry-sur-Seine, le

5, RUE DU PARC.

Reçu de la "Edison Electric Light Co. of Europe Limited", Huit cents (800) Parts de fondateur de la "Compagnie Continentale Edison" ; les dites Huit cents parts de fondateur représentent le dixième de la totalité des Parts de fondateur délivrées à la dite "Edison Electric Light Co. of Europe Limited" en vertu de la Convention portant la date du quinze Novembre 1881, passée entre la dite Compagnie et moi.

Je reconnais en outre, que les dites Huit cent parts de fondateur constituent règlement intégral de la commission à laquelle j'ai droit comme fondateur de la dite "Compagnie Continentale Edison" ainsi que cela résulte d'une lettre, datée du quinze Novembre 1881, qui m'a été adressée par ses signataires Messieurs Lowrey, Batchelor et Bailey.

Fait à Paris, le 6 Août 1883.

Je reconnais que je n'ai rien à réclamer à Mr Edison ou à la Electric Light Co of Europe en sa qualité de fondateur de la Cie Continentale Edison

Paris le 4 Juillet 1883

Ch. Bourgès

August 6, 1883

Receipt of Messrs Porges & Leon for 800 parts of Founder of Compagnie Continentale

1883-07-14

Statement regarding the unpaid claim of The Edison Electric Light Company of Europe, Limited, New York City, against the Compagnie Continentale, Paris, on account of the Edison Exhibit at the Paris Electrical Exposition.

THE ORIGINAL PROPOSED PUSKAS & BAILEY AND LEON CONTRACT.

The commencement of the Light Co's business in Paris was the proposed contract between Messrs. Puskas & Bailey and M. Leon, submitted by Mr. Bailey in the Spring of 1880, to the Light Co. for its approval.

It appeared, from that contract, that M. Leon wished to secure an option on the Edison system for Paris and suburbs, also a commission on the Edison business throughout France, and that he was willing to pay for this option the sum of 150,000 francs, or such smaller amount as it might cost to exhibit the Edison light in the Paris Electrical Exposition. It further appeared that Leon had doubts about the success of the light, consequently, as his option on Paris would not have much value if the Light failed, the contract provided that if the light was a failure at the Exposition, the Light Co. would reimburse him. Puskas & Bailey deposited 1000 shares of their own stock in the Light Co. to secure Leon, in case the Light Co. failed to reimburse him.

This proposed contract was not executed. The Light Co. decided, with Leon's consent, that the contract had better be made

1883-09-14

directly between the Company and him. Thereupon a new contract, with no substantial changes, was prepared and submitted to M. Leon through Mr. Wallerstein of New York. It was subsequently executed by the Light Co. and Leon, and is known as the Contract of June 8th. 1881.

CONTRACT WITH LEON, JUNE 8th. 1881. The main provisions of this contract, mentioned above, between the Light Co. and M. Leon were as follows:

(1) M. Leon was to have (1) the option until November 10th., 1881, to form a company for Paris and the Banlieu, (2) a commission on what the Light Co. might receive in case such company was formed, (3) a further commission of 5 per centum on all business done in France, and (4) the preference at equal price of all business done in France. This valuable option was afterwards extended, at Leon's request, until the end of February 1882.

(2) The Light Co. was to exhibit the Edison light at the Paris Exposition, using the money paid by Leon for the above option, to defray the expense, to the amount of 150,000 francs. If the light was not a success the Light Co. was to reimburse Leon, and Puskas & Bailey voluntarily left their 1000 shares of stock, above mentioned, in pledge to secure this repayment. The language of the contract (Section 3) is as follows:

"Leon binds himself to furnish to the Company such sum

1883-09-14

of money as may be necessary to make an exhibition of the Edison system of Lighting at the said Paris Exposition, said sum to cover the cost of the entire plant, including machinery, wires, lamps, et cetera; together with freight thereon, and the actual compensation and expenses of such person or persons as may be sent or otherwise employed by the Company in connection with said exhibition." The total expenditure was not to exceed 150,000 francs (about $30,000).

(3) There are three points upon which the contract is silent as follows:

First. Who was to furnish any additional money required in case the amount furnished by Leon was not enough? The contract failed to provide for this, and, inasmuch as Leon declined to furnish any additional amount, the Light Co. made up the deficit. The total cost of the Exposition plant and exhibition was $51,261.65, of which Leon paid only $30,000., and the Light Co. paid $21,261.65, thus making up the deficit.

Second. Was Leon to be reimbursed the 150,000 francs in case the light was a success but he still not form the Paris Company? In other words, suppose he did not avail himself of his option, even though the light was a success, was he to be reimbursed? The contract does not provide for any such repayment. The contract, however, does provide if the light did not succeed, the Light Co. would reimburse Leon; also that if the Light did succeed and Leon formed the Paris company, he was to be repaid out of what the Light Co. would get. But the contract was silent

as to whether Leon's 150,000 francs should be repaid in case the light was a success but Leon did not form the Paris Company. This is an important point. The Light was a success, yet Leon did not form the company, although he was in possession of the option to do so for nine months. Consequently, so far as the Light Co. is concerned, Leon had no right whatever to be reimbursed.

Third. Who was to own the exhibition plant, after the Exposition closed? This is a vital question, especially in view of the fact that Leon treated the plant as though he owned it, that is to say he took possession of the plant, sold it, and took the proceeds, all without the Light Co's knowledge or consent. What right had Leon to do this? The Light Co. asserts that he had no right, and the reasons for that belief are given below:

(1) It may be said that Leon furnished his money in order to acquire title to the plant, abd that therefore it was his. There would be force in this statement, were it true, but the fact is, as shown by the contract, that Leon paid his money not to acquire title to the plant, but to secure title to something else, namely, an option for Paris. Leon paid the Light Co. a certain sum for a specific thing, the Paris option, and the Light Co. agreed to use that money for another specific thing, to make an exhibition. That arrangement is, as matter of law, quite a different thing from Leon paying his money to buy and own the plant. The contract is clear upon this point. Leon bought an option and had a right to sell it; the Light Co., instead of putting the money he paid for the option in its treasury, agreed to spend it in

buying a plant; and the Light Co. owned the plant. All the right that Leon had in the premises was merely to compel the Light Co. to expend the money it had received from him, in a specific way, viz: on the exhibition.

(2) Again, it may be said that Leon was entitled to take the plant, after the Exposition was over, just as he would have been entitled to take the proceeds of the plant provided the Light Co. itself had then sold it. Let us examine this. Would Leon have been entitled to take the proceeds of the plant? In order to detect the falacy of this, let us suppose a case. Suppose that when the Paris Exposition closed, the Light Co. had been fortunate enough to find a customer to whom it sold the plant for say 500,000 francs, and suppose the Light Co. had the money in its treasury. Could Leon have claimed that money under the contract? The plant, of course, had belonged to sombody who had a legal title to it, and that party, whoever he was, would have been entitled to these 500,000 francs. Would Leon have been entitled to that money? Most certainly not. Not only does the contract nowhere provide that the title to the plant was to pass to Leon, thereby possibly enabling him to reimburse himself out of the proceeds derived from such a possible sale of it; but Leon's sole right to be reimbursed is limited by the contract to only two circumstances, in either one of which, and in those events only, he was to be reimbursed.

These two circumstances, provided by the contract, wherein Leon was to be reimbursed are as follows: (1) In case the Light

proved to be a failure, and (2) In case Leon formed a Paris Company. Leon's right to have his money repaid was limited to these two cases. He has therefore no right, under the contract, to be reimbursed under the present existing circumstances, namely, the success of the Light, but his failure to form a Paris Company.

It seems, therefore, to be clearly established by the above reasoning that if the Light Co., having sold the plant, had the proceeds in its treasury, Leon could not have taken title, under the contract, to the money. This is so not only because the contract did not give him title to the plant, but also because he was not entitled to be reimbursed his outlay in the event that actually happened, namely, the success of the light but his failure to form the Paris company within the nine months.

(3) But Leon may possibly claim the right to sell the plant and take the proceeds, as matter of equity and not of contract, on the ground that the money furnished by him was actually put into the plant. That is to say, he may choose to utterly ignore his legal status under the contract, and to claim that in equity he is entitled to what the plant brought. Even if the contract were thus set aside, and the matter were adjusted on a sort of equitable basis, even then Leon would not be entitled to the proceeds of the plant! Who paid for the plant? The total cost was over $50,000, of which Leon paid less than three fifths, and the Light Company paid the rest. Surely, even if the contract is to be set aside and equity is to prevail, Leon is not entitled to all the proceeds. Yet this is just what Leon has done. Although he paid for less than three fifths of the expense, he has

taken the entire proceeds and given the Light Company, who paid for more than two fifths, nothing.

WHAT THE LIGHT COMPANY CLAIMS. In view of what is above stated, the Light Co. feels justified in making the following claims against the Cie. Continentale:

(1) The Cie. Continentale has appropriated to its own use the property of the Light Co., without their knowledge or consent, and without paying them anything for it. That property is the Exposition plant. The Light Co. asks that this entire property be restored to its rightful owner, the Light Co., or that the entire value of it be paid to the Light Co. in money. The fact that the appraised value of the plant has been already paid to Leon is something the Light Co. has nothing to do with. That is a question to be adjusted between the Cie. Continentale and M. Leon. What the Light Co. asks for is either its property or the value of it in money, and it asks this of the Cie Continentale.

(2) If the Light Co. is rightly informed, the Cie Continentale has repaid to M. Leon all the money he advanced on account of the Paris Exposition, including the 150,000 francs furnished to the Light Co. If that is so, that is to say if the Cie. Continentale has taken upon itself to pay M. Leon's outlay in connection with the Paris Exposition, the Light Co. asks to have its outlay also repaid. In other words, if M. Leon has been made

1883-09-14

good as regards what the Edison display cost him, the Light Co. asks that it may also be made good. Seemingly there is no fair ground for discriminating between M. Leon and the Light Co. in this regard, and the Light Co. fails to see any reason why the expenses of one should be paid and not those of the other.

(3) Referring to the two preceding paragraphs, the Light Co. claims from the Cie. Continentale the sum of $21,261.65. The total expenditure touching the exhibition plant was $51,261.65, of which M. Leon paid $30,000, and the Light Co. paid the balance. Full details of all these expenditures have heretofore been handed the Cie. Continentale, and also furnished to Mr. Bailey, in a letter dated September 15. 1882. The following is a brief summary of the account:

1,000 Light Dynamo Account.....	$14,141.30
Edison Electric Light Co's bill for small Dynamos.	3,150.00
Mr. Edison's bill for boiler, lamps, fixtures, electrical supplies, cash disbursements &c.....	33,970.35
Total Exposition Disbursements.....	$51,261.65
Received from M. Leon.....	$30,000.00
Present unpaid Claim of Light Co.....	$21,261.65

CONCLUSION. The Light Co. has endeavored to set forth above, calmly and fairly, the grounds of its claims against the

1883-09-14

Cie. Continentale. If there is any error in this statement, either as matter of fact, or law, or argument, the Light Co. will be glad to have it pointed out; but otherwise, it feels that the claim should be promptly and fully allowed.

Office of the
Edison Electric Light Co.
of Europe, Limited,
No 65 Fifth Avenue,
New York City,
September 14th. 1883.

L. B. Eaton

Second Vice President.

WORKS:
CHICAGO, ILLS.,
—AND—
URBANA, OHIO.

W. H. CHADDOCK,
GENERAL AGENT.

GENERAL AGENT'S OFFICE,
United States Rolling Stock Company,
No. 210 La Salle Street,
Room 31,
CHICAGO, ILL., Sept. 21st 188 3

Dear Mr Edison,

I am in receipt of your letter of 14th inst and I regret very much the one which is to compel you to treat with bad faith on the basis mentioned in your communication.

Hoping that this matter will come to a satisfactory issue I leave it entirely in your hands.

A general view of the plan of the Electric Light Co. shows that you are the founder.

You are informed that we have now stock with which to [illegible] contract. Situation of the stock has changed since and I feel concerned as to its future.

Yours
Thos A Edison
Dr Geo Gouraud

1883-10-05

(2)

MEMORANDA ON THE PROPOSED INTERNATIONAL EDISON COMPANY.

TERRITORY AND PATENTS. This proposed company is to take the Edison patents for light and motive power for all the countries in Europe, except Portugal, Sweden, Norway, and the United Kingdom of Great Britain and Ireland. Both MrEdison and the European Company are to agree not to exploit his inventions in any of the countries of Europe, whether the laws provide for patents pr not. Thus the new company takes Switzerland, Turkey in Europe, Greece, and several other countries not belonging to the Edison Electric Light Company of Europe, Limited. It would appear that as regards these additional Countries, MR Edison's personal consent must be secured, and that of such other parties as he may have committed himself to.

The patents and inventions referred to appear to be limited to light and motive power, although, it should be noted, the European Co's contract with Mr. Edison also includes heat. Apparently the International Co. has overlooked heat.

The present contract between the European Company and Mr. Edison also provides that he is to give them his inventions only until January 12th: 1886, but this limitation is apparently disregarded by the International Company, it evidently being their intention to have all future said inventions of Mr. Edison without limit as to time.

1883-10-05

CAPITAL. The capital is 30,000,000 francs, in 60,000 shares of 500 francs each, all of which is to be subscribed and 50 per cent of which is to be paid up, before the company is constituted. The privilege of subscribing to this original capitalization is allotted as follows:

(1) The right to subscribe to at least one quarter is to be given to the present stockholders of the three Edison companies in Paris. That would dispose of subscriptions amounting to say 7,500,000 francs.

(2) The entire property, contracts and business of the three existing French companies is to be transferred, at cost price to the International Company, the French companies receiving in payment shares of the International. These properties amount to the following sums:

Societe Industrielle.....	1,858,000 francs .
Compagnie Continentale.....	364,000 "
Societe Electrique.....	296,000 "
Total.	2,518,000 francs.

It does not appear whether stock for an equal amount, fully paid, is to be transferred, or stock for double the amount, half paid. Assuming that stock fully paid will be issued, this would dispose of say 2,500,000 francs additional subscriptions.

(3) After deducting the 10,000,000 francs mentioned above, the right to subscribe for the remaining subscriptions, amounting to 20,000,000 francs, is to be given to a syndicate of bankers to be made up in the principal countries in Europe. The

1883-10-05

shares are to be printed in the German, English, French and Dutch languages and currency, with possible quotations, at once, on the London, Paris, Berlin and Amsterdam Exchanges.

FUTURE INCREASES OF CAPITAL. The capital may be augmented at any time on the recommendation of the Directors, approved at a general meeting of the stockholders. Preference for subscriptions to increased capital is reserved as follows:

(1) One quarter to the subscribers, or their assigns, of the shares constituting the first capital pro rata.

(2) One quarter to the Directors in office when the capital is increased, to allow tham to provide "for the interests of the service". Apparently this right is a trust which the Directors are to exercise for the benefit of the company, and not as a personal perquisite.

(3) The remaining one half to the stockholders at the date of increase, pro rata.

PROFITS. The net receipts, after deducting expenses, are to constitute the profits. From these profits there is to be taken 5 per cent for legal reserve. After deducting this 5 per cent, the remaining 95 per cent of the net product, to be considered net profits, is to be distributed as follows:

(1) The shareholders are to be paid a dividend of 6 per cent. It does not appear whether this dividend is always to be paid on the nominal or par value of the shares, or only propor-

International Co. ? 1883-10-05

tionately on the installments paid, if all the stock is not fully paid at the time of increase.

(2) Eight per centum of the net profits is to be given to the Council of Administration.

(3) Forty per cent of the net profits is to be given tomthe European Company and Mr. Edison.

(4) The remainder is to be used for a supplementary dividend to the shareholders.

These proportions are to be invariable, whatever may be the future augmentations of the capital. Founders shares are to be issued to the European Company and Mr. Edison, to represent their 40 per cent of the net profits, the same to be assignable and to be disposed of by them according to their pleasure.

ROYALTY. There is to be paid to the European Company and Mr. Edison, a royalty of 25 centimes for every lamp manufactured, employed or sold by the Company or by its licensees. Apparently it is not the intention that this royalty shall belong to the parts of founder, mentioned above. Evidently it is to be a separate profit accruing directly and solely to the European company and Mr. Edison, or their assigns, without reference to the parts of founder and withoyt any participation on the part of Messrs. Puskas & Bailey, M. Porges, M. Leon, or any one else who may possibly have a percentage in the Light Co's parts of founder.

PARTS OF FOUNDER AND PROFITS. Mr. Bailey states that the

parts of founder to be issued to the European Company to represent its 40 per cent of the profits are to be subject to the same divisions and percentages as the present founders shares. What he probably means by this is that the European Company is to recognize Messrs. Puskas & Bailey, M. Leon, and Messrs. Porges and Leon, as entitled to the same percentage in these new parts of founder that they had in the old ones. The division of the old founders shares was as follows:

Compagnie Continentale. The European Company had eight thousand parts of founder of which it gave one tenth (800 shares) to Messrs. Porges and Leon; also 70 shares to M. Leon; and out of the remaining 7130 shares, 5 per centum, 356 shares, were given to Messrs. Puskas and Bailey, leaving 6674 for the European Company, which are now in its treasury in New York City.

Societe Industrielle. The European Company had three thousand parts of founder of which it gave one quarter, 750 shares, to Porges and Leon, and 5 per centum of the remainder, 112 shares, to Puskas and Bailey, leaving 2138 parts of founder, for the European Company, which are now in its treasury here.

Societe Electrique. The European Company had three thousand parts of founder, of which it gave one sixth, 500 shares, to Porges and Leon, and five per cent of the remainder, 125 shares, to puskas and Bailey , leaving 2375 parts of founder for the European Company, which are now in its treasuty here.

It thus appears that in the case of the three companies now existing, a different division was made for each company. Ac-

cordingly, if it is proposed to pay a percentage to the same parties out of the founders shares of the new company, the question will arise which basis of division shall prevail? Probably the proper basis, inmcase the same percentages are again to be allowed, would be the division made in the case of the Compagnie Continentale. Should that division be made, the profits accruing to the European Company, after making the division, would be 33 $\frac{87}{100}$ of the net profits.

COMPARISON BETWEEN PRESENT AND FUTURE PERCENTAGE OF PROFITS. How does the above proposed share of profits in the International Company, 33 $\frac{87}{100}$ of the net profits, compare with the European Co's present share of profits in the existing Paris Companies?

Before this question can be answered certain details affecting the comparison must be noted. For instance, in the case of two of the French companies the entire capital stock is to be repaid out of the first profits, while as regards the third, the Manufacturing Cpmpany, the capital is to be repaid by installments out of the profits, of which one tenth is to be set aside for that purpose out of each dividend. Now in the case of the proposed International Company, there is no provision for repayment of capital whatever. As regards the legal reserve of 5 per centum, it us the same in all the companies, so there is no difference there. As regards compensation to Directors, they are now paid in the three existing French companies, consequently the proposal to pay

them in the International company would make no great difference, although they are evidently to be better paid in the new company. With reference to the proposed 6 per cent preferred dividend in the International Company, there is no preferred dividend in two of the French companies, but in one, the Manufacturing Company, there is a preferred dividend of 6 per centum. These details are important and must be considered in making a comparison of profits.

To compare the European Co's share of profits in the Compagnie Continentale with its proposed share in the International Co., let us make the comparison without reference to the fact that in the first named company the capital is to be repaid before profits are divided. Aside from that fact, the European Co's percentage of profits in the Compagnie Continentale is 80 per cent, whereas it is to be only 40 per cent in the International company. Were the same division of percentage to be allowed to Messrs. puskas and Bailey and others above named in the International Company as have been already allowed, the percentage of profits ultimately coming to the European Company would be 33 $\frac{87}{100}$, as against 67 $\frac{74}{100}$ in the Compagnie Continentale, in other words just one half as much. But it must be remembered that the European Company is to have a royalty on every lamp, which is an additional profit, their being no roylaty whatever paid under the existing arrangement with the three French companies. Moreover, the entire business now done by the existing three French companies, namely central station, isolated and manufacturing, will all be done by the new company, consequently a percentage in the profits of that company

1883-10-05

means a share in the profits of all three branches of the business.

At present the European Company is entitled to receive, after allowing for all percentages and divisions, and after the capital shall have been repaid as stated above, 67 $\frac{74}{100}$ of the profits of the Compagnie Continentale; 35 $\frac{525}{1000}$ per cent of the profits of the Manufacturing Company; and 47 $\frac{1}{2}$ per cent of the profits of the Isolated Company. Averaging these, the percentage and profits in the case of the three existing French companies, ultimately coming to the European Co., is 50 $\frac{28}{100}$ per cent, or a little over one half whereas the proposed percentage coming to the European Co. from the International Company, is 33 $\frac{87}{100}$ per cent.

NOTE. Whatever percentage, if any, may have to be paid Mr. Edison, out of what the European Co. gets, as compensation, first, for contributing his inventions for a longer period than until January 12th. 1886, and second, for the additional territory in Europe not now belonging to the European Company, would have to be deducted from the above.

PROFITS ALREADY EARNED. In considering whether the European Co. had better consent to the formation of a new company, the question naturally arises whether the business of the three existing companies has thus far proved profitable? Balance sheets have been received here from all three companies showing the financial condition of each up to June 30th.1883. The condition of these companies on that date was as follows:

1883-10-05

COMPAGNIE CONTINENTALE. This company has always done business at a loss. The balance sheet of December 31st., 1882, shows that up to that date the company had done business at a net loss of 327,995 francs. The balance sheet of June 30th. 1883 shows a large receipt in cash from the German company for its license, namely, 255,741 francs; but notwithstanding this revenue and certain other small profits, the business from the formation of the company up to June 30th. 1883, shows a net loss of 211,752 francs. The cash in bank, June 30th. was 361,933 francs. The amount invested in isolated plants in various parts of Europe, was 396,482 francs, the largest of these installations, the Brunn Theatre, being carried on the books of the company at 188,648 francs. The balance sheets show that if the company had gone into liquidation at the date of the last report, June 30th. there would have been a large deficit, and the stockholders could not have received back the full face of their investments. The capital is one million francs.

SOCIETE ELECTRIQUE, OR ISOLATED COMPANY. This company made a profit up to December 31st. 1882, of 15,009 francs, and from December to June 30th. 1883, 136,290 francs, showing an aggregate net profit, from the start, of 151,299 francs. There was in bank, June 30th., 166,738 francs. The investment in dynamos and material was 440,500 francs. Apparently this company has a small surplus. The capital is one million francs.

SOCIETE INDUSTRIELLE, OR MANUFACTURING COMPANY. This company appear to have done business at a small profit. Prior to

1883-10-05

December 31st. 1882, the business was evidently done at a loss, but since that date, and especially during the last months, a considerable profit has been made realized, which Mr. Bailey estimates at 150,000 francs. Taking the business of this company from its start until June 30th. 1883, it has made a net profit of 56,788 francs, according to the balance sheets. It appears that this company is now well established, the manufacturing is successfully and economically conducted, and the prospects are good for a largely increased profit in the immediate future.

To sum up the profit and loss account of the three companies from the time they started until June 30th. 1883, the result shows that the aggregate business has been done at a slight loss? The exact figures are as follows:

	Profit.	Loss.
Compagnie Continentale		211,752
Societe Electrique	151,298	
Societe Industrielle.	56,787	
	208,085	211,752

NOTE. The Compagnie Continentale and the Societe Electrique have jointly sold 287 dynamos. This is a large business. All of these dynamos appear to be giving entire satisfaction. Unfortunately, this business has thus far not been done at a profit, probably for the reason that the main object has been to get the business started and well introduced. That has evidently been accomplished in a most successful manner, and there can be no doubt that the business in the future will prove to be both large and profitable.

1883-10-05

REASONS FOR FORMING THE NEW COMPANY. This paper is not meant to be argumentative on the question of the new company, but merely to present figures and facts. There are, however, certain considerations touching the question which may be presented, otherwise the paper might be considered incomplete. They are as follows:

(1) The possible business in Europe is enormous, and more money is required to develop it. Mr. Bailey states that it is impossible to secure this money by means of local companies, as at first intended. How far he is correct it is hard to say, but our experience in the United States shows that the business must be well established on a paying basis, which has not yet been done in Europe, before local capital can readily be had. Mr. Bailey is therefore probably right in saying that the quickest and easiest way to develop the business in Europe is to have the capital furnished by capitalists at money centres, and that the best way to do this is to enlist the capitalists in one large company. But, on the other hand, we must not forget that the central station business is being rapidly established in this country, and that as soon as dividends are earned here, they will tend to expedite the formation of local companies in Europe. Mr. Bailey's plan may be the quicker and easier one, but there can be no doubt, that the progress now being made in this country will in time make itself felt abroad.

(2) The French companies appear to have gone on the prin

1883-10-05

ciple of getting plants introduced everywhere, no matter whether they made money or not. It is too late now to discuss whether that was the best business principle. Their money has been spent in starting the business, and to avail themselves of the prestige thus occasioned, additional capital is undoubtedly needed.

(3) New men, new blood, and new interests will be brought in. This is important. The capitalists who start the business may get tired and worn out, and the influx of new blood and fresh capital will be an important item in the rapid and successful development of the business on a large scale. Moreover, a combination of financial interests, each with a strong local backing, would give the business great prestige.

QUESTIONS FOR Mr. BAILEY TO ANSWER. The following questions have been sent to Mr. Bailey, and his answers will throw light on several points which at present are not entirely clear:

(1) If the new company proposes to take more territory than now belong to the Compagnie Continentale, how will Mr. Edison and the owners of that territory be compensated?

(2) For how long a period would the new company expect to secure Mr. Edison's inventions? The present company will have them, under present contract, only until January 12th. 1886. Apparently the new company expects them for a longer period. If so, how do they expect to compensate Mr. Edison.?

(3) When the new company buys out the business of the three existing companies, paying for the same at cost, as is pro-

1883-10-05

posed, will the stock in the new company be issued at par, fully paid. In that case, how would that stock stand as compared with the balance of the stock, on which only 50 per cent will have been paid in?

(4) Is the right which the Directors have to subscribe to one quarter of future increases of capital, a personal perquisite, or is it a trust, to be exercised for the benefit of the company.

(6) Is the 6 per cent dividend to be paid per share or per dollar? That is to say is the dividend to be 6 per centum on the par value of a share, or on the amount paid in?

(7) Is it well understood that the lamp royalty is to be psid to the European Company here without any additional divisions or percentages to any one in Europe, whether to Puskas & BAiley, Porges, Leon, or any one else?

(8) Will the European Company be expected to contribute any percentage or division of its founders shares to any one in EUrope, say to Messrs. Puskas & Bailey, Porges and Leon or to any one else? If so, how much?

(9) If the three French companies sell out their business to the new company for stock, what will they do with it. Will they carry it in the treasury or divide it up, among the stockholders, or what? If any surplus remains, after paying back the subscribers at par, franc for franc, what will be done with it?

(10) Some cash ought to be paid to the European Co. here. Mr. Bailey states that he had fully appreciated the import-

ance of such a cash payment, but that he thinks it impossible to secure it. It is doubtful whether the European Company would in any event consent to the formation of the proposed new company, unless at least a small amount of cash, if not more than $100,000. were paid to it.

(11) If the new company is formed, what will have been given to the European Company and what will they have in their treasury to show for the business thus far done in Europe. It is true they will have the new contract with the International Company, but will they have anything else. Will there be no dividends, surplus, cash payment, or anything else for them to report to their stockholders as the fruits or profits of the two years business.

(12) WILL the Compagnie Continentale recognize and pay the claim against it, as heretofore made up and presented, on account of the Expense incurred by the European Company in connection with the Paris Exposition?

CONCLUSION. It is hoped that the above statement is sufficiently full to enable the directors to intelligently consider the question of the proposed new company. Any one desiring further information, should read Mr. Bailey's printed "Notes", also a copy of the Articles of Association of the International Company, also a lengthy letter from Mr. Bailey dated September 3rd, 1883, advocating the case of the new company, all of which can be seen at the office of the Company.

1883-10-05

15

S. B. Eaton

Second Vice President.

Edison Electric Light Company

of Europe, Limited.

No. 65 Fifth Avenue.

October 5th. 1883.

1883-10-27

The Edison Electric Light Company of Europe Limited

65 Fifth Avenue New York October 27th. *1883*

Dear Sir:

A special meeting of the Directors of the Edison Electric Light Company of Europe, Limited, willbe held at the office of Messrs. R. L. Cutting Jr. & Co. No. 19 William Street, New York City, on Tuesday, October 30th., at 1 o'clock, P. M., for the purpose of authorizing the sale of certain Bonds of the Company.

Yours truly,

S. Walker

Second Vice President.

New York, October 30, 1883.

The Edison Electric Light Co. of Europe, Limited,

65 Fifth Ave., N. Y. City.

Gentlemen:-

Please take notice that I hereby relinquish and waive any lien which I may have on Debenture Bonds of your Company, Nos. 187, 188, 189, 194, 195, 196, 197, 198, 199, 200, as security for the unpaid promissory note of your Company, dated May 1st. 1883, for the payment of $1100 in sixty days after date to my order.

Yours truly,

R. L. Cantling

New York, October 30, 1883.

The Edison Electric Light Co. of Europe, Limited,

65 Fifth Ave., N. Y. City.

Gentlemen:-

Please take notice that I hereby relinquish and waive any lien which I may have on Debenture Bonds of your Company, Nos. 187, 188, 189, 194, 195, 196, 197, 198, 199, 200, as security for the unpaid promissory note of your Company, dated May 1st. 1883, for the payment of $600 in sixty days after date to my order.

Yours truly,

Frederick W. Foote

[MEMORANDUM BY CHARLES BATCHELOR]

European Co –

We have sold 2000 founders shares & realized $20,000 from which we have bought out about 60% of the bonds & settled some of the bad credits – We have another 1000 founders to sell but as it is not pressing to sell low we shall want a letter want you to resign as Prest. ~~so that~~ I go in temporarily We dont want Foote there

2

$200 000 stock Light Co to have the right to take it at par any time in the year — The $200 000 stock of M W to be provided by $100 000 subscription to Treasury & the 2nd $100,000 to be made (if Light Co exercises option) by increase of capital – No dividend to be made by M W during loan

If you dont want to do this we might sell the stock that we were going to divide on the same basis as Coster proposes this will keep other people out if you want to

I think however it ~~would~~ would be advisable to have the Light Co as a stockholder to a considerable extent & it in preference to anyone else

THOMAS A. EDISON,
NO. 65 FIFTH AVENUE.

CABLE ADDRESS—EDISON, NEW YORK. (1883)

Sheet No. 1 (1885)

NEW YORK 188

Edison Electric Light Co. of Europe

Original Issue	10,000 Shares
Thos. Lucas	1 "
C. Batchelor	169 "
J. de Lucas	500 "
L. Bergmann	4 "
	10,674

Transfered:-

Jchas Laughlin	150
M. N. Dyer	10
Mary E. Carman	10
Chas. L. Acam	10
Jas. D. Moll	10
J. A. Upton	425
L. C. Griffin	75
Chas. Balmwal	10
H. Coddington	10
John Ernesi	20
Alfred Hayes	10
Pres. Nas. Lupostas	10
Chas. L. Clarke	20
C. A. Jacobi	1690
C. Johnson	10
Francis A. Jehl	5
Theo. Pinokas	500

Forward 2975

THOMAS A. EDISON,
No. 65 FIFTH AVENUE.

CABLE ADDRESS—EDISON, NEW YORK

Shut No 2

NEW YORK 188

Transfers:—

Forward	2975	As per Shut No 1 —
Chas Batch	5	Original Bond
W. A. Barker	1000	
W. J. Perry	100	10,674
M. A. B. Wilbur	10	
E. R. Wilbur	10	
Otto A. Moses	50	
J. B. Eaton	50	
Prescott Douglas	100	
J. F. Barker	10	
W. C. Jacques	25	
W. J. Perry	75	
A. C. Hunt	5	
W. A. Gildersleeve	95	
W. J. Perry	100	
	500	
		5110
		5,564

1883. Electric Light - Edison Lamp Company - General (D-83-032)

This folder contains correspondence, agreements, and other documents relating to the business of the Edison Lamp Company. Most of the correspondence is by Francis R. Upton, general manager and treasurer of the company. Also included is a 21-page memorandum by Sherburne B. Eaton, dated January 19, 1883, concerning a new contract involving the Edison Electric Light Company, the Edison Lamp Company, Edison, and others.

Approximately 80 percent of the documents have been filmed. The following categories of documents have not been filmed: routine correspondence regarding orders and shipments of lamps; receipts; trial balances and other routine financial documents; duplicate copies of selected documents.

1883-01-02

CORNING GLASS WORKS,

A. HOLLY, Jr. Pres't

CORNING, N.Y. Jany 2nd 1883

Mr Thos A. Edison

65 Fifth Ave N.Y.

Dear Sir

At the request of Mr Francis R. Upton, we send you the following list of prices charged for packages.

Tierces for	Bulb	$1.50	each
Barrels "	"	.35	"
Large Boxes "	Tube	1.25	"
Med " "	"	1.00	"
Small " "	"	.75	"
Barrels "	"	.35	"

Very truly yours

H. P. Sinclair Sec'y

Monthly Statement

THE EDISON LAMP CO.,

East Newark, N. J. Jan 2nd 1883

Thomas A. Edison Esq.

T. R. Upton	advance	27021.62
E. E. Ill. Co.	"	1879.20
Bills due by us		37103.32
		$ 66004.14

Bills due to us $ 14010.82

Lamps on hand Dec 1st		59219
" manfd in "		42062
		101281
Home Sales for month	21899	
Foreign " " "	11820	33719
		67562

Lamps on hand Jan 2nd 1883

Home orders for month	20036	
Foreign " " "	10000	
	30036	

Yours truly
Edison Lamp Co.

Statement

THE EDISON LAMP CO.,

East Newark, N. J., ... 188

Cost of 143000 Lamps Manuf. and [illegible] from July 1st 1882 to Janu 1st 1883

Material on hand July 1st	5576.00
" &c for six months	22701.19
Labor " " "	45489.58
Interest on Capital	4890.34
" " Mortgage	900.00
	79557.11
Material on hand Janu 1st 1883	15892.85
	63664.26

Cost per Lamp 44.5

Statement

THE EDISON LAMP CO.,

East Newark, N. J., ... 188

From July 1st 1882 to January 1st 1883

Lamps on hand July 1st 82		57449
" manufd to Jan 1st 83		147511
		204960
Add High Volt Lamps		5348
		210308
Lamps Shipd Foreign	65038	
" " Home	77708	142746
Lamps on hand Jany 1st 1883		67562

Cash received for Lamps Sold $56021.09

THE EDISON LAMP CO.,

East Newark, N. J., Jan 3 1883

[illegible] shows a reasonable rate of breakage in [illegible] of lamps [illegible] up + burned without [illegible]

Per cent of lamps broken	Average hours
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
20	[illegible]
25	[illegible]
30	269
[illegible]	[illegible]
40	430
[illegible]	493
50	551
[illegible]	586
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
80	956
85	1026
90	1060
95	1190
100	1424

Taken from sets of lamps burning at 16 and 20 candles.

EDISON LAMP COMPANY

34
1883-01-03

EAST NEWARK, Jan. 3, 188

Upton

Dear Mr. Edison

Mr. J. Force has been earning $15.00 a week with us.

His understanding is that he is to have this amount and a commutation ticket to Newark

Francis R. Upton

Mr Edison
glass blower of Lebanon
Chas Ro Shedlowsky

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST ORANGE, Jan 4, 1883

Dear Mr. Edison:

The Lamp Co. are about 25,000 lamps behind its orders. As soon as the Isolated Co: place their order for 50,000 lamps we can see daylight, and if we can have 40 cts. for lamps and the money due us we shall be able to run one more row in the pump room without danger of incurring increased liabilities.

It is exceedingly important that we have the five cents soon as they are now putting in very large orders for the U.S.

The contract that I small showed me I acknowledge to be poor as protecting the Lamp Co. from the Light Co. breaking the contract.

From all I can learn regarding

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

T. A. E. 2

EAST NEWARK, ... 188

Maj. Eaton and Mr. Kinsey they do not intend to give us any contract but one that they can drive through in the future.

Taking this view I assent to the present version, in order that there may be a settlement.

If it were my private matter, I would notify the Light Co. that until we had a contract to protect us that we should charge 50 cts. for lamps, which is, as we are now manufacturing, only a fair price, giving us a reasonable profit. As it is now, we are giving them about ten cents on each lamp, with every disposition shown on the part of those directing the policy of the company to take all the profit when any are to

EDISON LAMP COMPANY.
THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, ... 188

seem.

For example. The contract to give us only fair rights has now been hanging for a year and a half and the prospects are that it will hang indefinately, for Maj. Eaton will require even more time than Mr. Lowry. — The leading directors of the Edison C. say that they wish to draw all companies into one grand company. That means that they will take the Lamp Factory and all its rights. Now that we have picked $200.000 in this place and pointed out the way that it can be made profitable they wish to reap the profits.

I am not naturally suspicious but in this case I

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

T. A. E. 4

EAST NEWARK, ... 188

think that Mr. Eaton and Mr. Lowrey are leading us a wild goose chase and that they never intend to tie the light Co's hands to any one place to get lamps.

I am looking to the future in wanting the contract made binding for some day it will be exceedingly profitable. For the present we are making asses of ourselves to give a soulless corporation ten cents on every lamp out of our own pockets with no guarantee for the future, not even a permit to use the apparatus we have for this special ~~use~~ purpose.

Yours Truly

Francis R. Upton.

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST ORANGE, June 4, 1883

Dear Sir:

We owe Bergmann & Co. $1917 7/100 today.

The greater portion of this has been standing four months.

I return letter from Batchelor. Mrs. Upton had taken care of it.

The London lamps are now all shipped. The Manchester lamps will be ready I hope by end of next week.

I have thought that they are trying to work us for 40 cts. by ordering these lamps, which they may use for Isolated.

Yours Truly
Francis R. Upton

1917.07 98680

89755

06.90

1917.07

18.90

103562

94241

.07252

198528

.10.86

7

.07252

191707

19.86

193693

.0986

6

06.909

3 lb

2

29.

CORNING GLASS WORKS,

A. HOUGHTON, JR. Pres't.

Corning Glass Works

CORNING, N.Y. Jany 6th 1883

Mr Thos A. Edison

Dear Sir

In reply to your esteemed favor of 4th inst, the prices given in our letter of 2nd inst for packages, were fixed by the association.

It is named as follows.

Flint & Lime Glass Manufacturers Association.

Very truly yours

H. P. Sinclaire Sec'y

Write thanking them for the information

1883-01-13

THE EDISON LAMP CO.,

East Newark, N. J., Jan 13th 1883

Samuel Insull Esq.

Dear Sir -

Herein find a memd of Mr T. A. Edison's ass- account

1881 Jan 26	ass.	12000.00	1881 May	Balance	41984.12
Feb 22	"	9600.00	" 24	check	5250.00
Apr 12	"	6375.00	" 28	"	3000.00
May 17	"	9375.00	June 8th	"	1125.00
" 19	"	14009.13	" 8	"	.01
July 8	"	7500.00	July 15	"	7500.00
Aug 16	"	7500.00	Aug 20	"	1000.00
Oct 1	"	7500.00	" 26	"	1200.00
Nov 5	"	7500.00	Sept 2	"	1200.00
Dec 20	"	7000.00	" 9	"	2000.00
1882 Mch 8	"	7000.00	" 23	"	1500.00
June 27	"	25125.00	" 30	"	2000.00
		120484.13	Oct 8	"	900.00
Dec 15 Agmt		1833.30	" 11	"	4500.00
		$122317.43	" 24	"	600.00
			Nov 28	"	600.00
			" 9	"	6410.00
					80769.13

1883-01-13

THE EDISON LAMP CO.,

East Newark, N. J., ... 188

Dr

Forward

$ 122317,43

Cr

Forward

		80769.13
1881 Dec 9	cash	590.00
" 17	"	1000.00
" 19	"	720.00
" 23	"	1200.00
1882 Jan 12	"	1000.00
" 28	"	425.00
Feb 3	"	500.00
" 7	"	2000.00
Apr 22	"	~~3000.00~~
" 29	Mr Stolzer	3765.34
May 10	Cash	6000.00
" 29	"	389.66
Aug 3	"	3000.00
" 14	"	5000.00
Sept 1	"	1250.00
Nov 7	"	6000.00
" 30	"	5000.00
		121609.13
Balance due us Jan 1st 83		708.30
		$ 122317.43

1883-01-13

THE EDISON LAMP CO.,

East Newark, N. J., Jan 13th 1883

Samuel Insull Esq.

Dear Sir—

Herein find a mend of Mr Chas Batchelors assess-account.

1881			1880 Dec 18	Dund-	1751.14
Jan 26	ass-	1500.00	1881 Jan 26	P.a.e—	1500.00
Feb. 22	"	1200.00	Feb 4	Check	1200.00
Apr 12	"	850.00	" 16	"	850.00
May 17	"	1250.00	July 9	"	1250.00
" 19	Cash-	1751.14	" 18	"	1000.00
July 8	ass-	1000.00	Sept 9	"	1000.00
Aug 16	"	1000.00	Oct 11	"	1000.00
Oct 1	"	1000.00	Nov 11	"	1000.00
Nov 5	"	1000.00	1882 Jan 12	"	1000.00
Dec 20	"	1000.00	April 22	"	1000.00
1882 Mch 8	"	1000.00	Sept 1	"	3750.00
June 27	"	3750.00			
		$16301.14			$16301.14

Yours truly
Edison Lamp Co.

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, Jan. 15, 1883

Dear Mr. Edison:

The enclosed statements will show the state of our business since the start.

The great trouble is in the fact that we have been compelled to make lamps at a loss and to assume all experimental expenses. During the past six months we have spent as near as I can estimate between $5000 to $6000 experimenting, that has been included in the ~~the~~ cost of lamps. Yet including this I can show that we have held our own in making lamps.

At present we are having very heavy demands made on us for cash. Outside of any sales of lamps we need $5000

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, ...188

to carry us through our June bills successfully.

If orders keep coming in we shall make both ends meet during the next six months.

Our cost sheets show the cost of lamps including all items such as experimenting, depreciation, interest on capital, mortgage and loans, and material used.

July - Aug	52.6 cts.
Sept.	75.
Oct.	47.
Nov.	39.4
Dec	36.8

Average cost for six months 44.2 cts

In Dec. and Nov. we made a very large number of lamps.

Yours Truly

Francis R. Upton.

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

11

Upton

EAST NEWARK, Jan. 17 188 3

Dear Mr. Edison:

Maj. Eaton spoke to me today about leaving instructions that when Meadowcroft came out with visitors he should be admitted to the Factory. I told him that you were the one to be consulted in the matter.

I wish you to make some definate arrangement with Maj. Eaton regarding this point and notify me of your decision. I see no objection to taking men that are outside of the technical part of the business through. Men like Barker hurt us most.

I sent you today the twisted carbons. I took them to N.Y.

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, ...188

myself and gave them to Healer with special charge to be careful.

We are now looking for trouble in the state of the fibre when it is carbonized whether it is dry or wet.

Also we are trying ~~warming~~ warming the mould before putting into the furnace. We are trying slow working pumps and ~~other workings~~ Howell and Faxelby working.

The 16 candle set have struck 625 hours without one breaking. Money is awful tight!

Yours Truly

Francis R. Upton.

EDISON LAMP COMPANY.

EDISON, PRES'T.
WM R. UPTON, TREAS'R.

11

Upton

EAST NEWARK, Jan. 18, 1883.

Dear Mr. Edison: Financial aspect 1882

Regarding the use made of money this last year.

We have made about 200-000 lamps (two hundred thousand) and shipped about 180,000.

We have about $7,500 ~~worth~~ more stock in process of manufacture than at the commencement of the year: Our loss in making these lamps taking the face of our books has been $20.181. less material on hand it is $12.681. This amount is less than we can account for directly in experimenting. That has been charged to Lamp Account

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, ... 188

During the past year there has been two assessments

March 8	10000
June 27	37500
	47.500
F. R. Upton	27.021
Cash	74.521

We show for this

Material in manufacture	7.500
East Newark payments	13.000
Machinery & Tools	20.000
Buildings and Fixtures	30.000
Paid Edison Ill. Co. advance	5.621
	73.121

Now if we can raise $5.000 over and above lamp sales it looks as if we could pull through, if we can get 40 cts.. If we get an advance from the Isolated Co. we only discount the future.

Yours Truly

Francis R. Upton.

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

1883-01-01

EAST NEWARK, ... 188

We have orders for

1000	lamps	@	$1.50	1500.00
1000	"	@	2.50	2500.00
50	"	@	5.00	250.00
50	"	@	2.50	125.00
3800	Smoa	"	.50	1900.00
10000	No. S.	"	.40	4000.00
5000	"	"	.35	1750.00
6000	England		.50	3000.00
2000	Amsterdam		.50	1000.00
				16625.00

We are assured of by Jan. 20 orders for

30000	lamps	@	40 cts	12000.00
5000	"	"	40 "	2000.00
				30025.00

There are now burning

35000 lamps in the U.S.
5.000 " " England
20.000 " " Europe
3.000 " " Foreign countries
1.000 " " on the water
64.000

There will require renewal at least twice a year or an average 128.000 lamps a year for renewals.

We have already shipped 243.314 lamps.

1883-01-01

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, ... 188

Due	F. R. Upton	27.022.62	
"	Edison Co.	11.042.08	
		38.063.70	38.063.70
Bills due	Jan	12.000.00	
" "	Feb	10.000.00	
	March	5.940.44	
		27.940.44	27.940.44
			66.004.14

Consolidated Fruit Jar Co.	898.83	
Corning Glass Works	14980.67	
Patterson Bros.	767.38	
Chas. Burroughs	205.27	
A. B. C. Co.	403.83	
J. Mackenet & Co.	147.54	
Peter Hayden	121.30	
Cornell & Cue	114.42	
J. Dixon Crucible Co.	669.32	
Salamander Works	247.06	
Wm. Murray	109.57	
Van Winkle Stent & Co	124.63	
Louis A. Riley	309.19	84
J. Mustarg	225.00	
J. E. Smith	205.72	
Chas. Pratt	580.94	
E. P. Backus	286.94	
D. L. & W. R.R.	744.98	
Peter Boyle	292.97	
Morris Talker & Co.	400.00	
Geo. Plaice Mag. Co.	2284.65	
Chatin Hall Mfg.	320.00	24,440.31
Small Bills	31	3500.13
		27.940.44

1883-01-01

EDISON LAMP COMPANY

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, ... 188

Since the start in 1880

There has been paid in by partners 163.011.41

By F. R. Upton 27.021.62

Lamp sales 1880-1881 13.175.29

" " Jan - June 1882 35.208.08

" " June 1882 - Jan 1883 56.021.44

Total cash handled 294,437.84

Liabilities 38.982.52

Total 333,420.36

Lamps sold 104.404.81

Assets 145.472.83

249 877.64

Experiments, Expense movings 83.542.72

Loss on Buildings & Fixtures Menlo Park, 333.420.36

Expense training help

$75.000 of this will be refunded to the Lamp Co. by the Edison Light Co. in the profits, out of their share, according to contract.

Lamps cost 1880 $1.01

" " Jan to July 1882 .80

" " July 1882 to 1883 .445

January 19th, 1883. S. B. Eaton's memorandum on proposed Lamp Contract.

In making these memoranda I had before me the original lamp contract of March 8th, 1881, also Mr. Lowrey's first draft of the proposed amended contract, which I have marked with red lead pencil A. B., also Mr. Lowrey's second draft of said proposed amended contract, which I have marked with red lead pencil C. D.

FIRST. The old contract now in existence, is between the Light Company and Mr. Edison. The proposed new contract is between the Light Company, party of the first part; the Lamp Company, party of the second part; Mr. Edison, party of the third part; and Messrs. Batchelor, Johnson and Upton, parties of the fourth part.

The reasons for introducing these new parties appear further on in these memoranda. I see no objection, provided our Company is willing to allow the lamp factory to be organized as a corporation, instead of standing, as now, in Mr. Edison's name. He thinks a corporation will be more convenient, that additional capital can be more easily secured, and that in the event of deaths, the business will suffer less disturbance.

I think this change might, on the whole be allowed.

SECOND. It should be noted that this new contract cancels the old contract and that the rescision of the old contract takes effect retroactively, as of September 1st, 1882. Consequently, the increased price for lamps (40 cents), mentioned in this new contract, will date back to September 1st. This will work no hardship, because purchasers of lamps at the present price (35 cents), have been notified they might possibly have to pay this increased price, beginning September 1st, 1882.

I see no objection to the above retroactive effect.

THIRD. The second section of this new contract transfers the existing lamp contract, which is now with Mr. Edison personally, to a corporation. I believe this corporation has not yet been formed, but that it will be formed under New Jersey laws as soon as the Light Company signifies its approval of this new contract.

This is a very important change. Under the old contract the Light Company has the personal liability of Mr. Edison as a quarantee for faithful performances. Under the new, it will have the liability of a corporation, liable only to the extent of its capital (I have not the corporation laws of the State of New Jersey before me), and the Light Company has no means of knowing who in the future will be the stockholders of the said corporation.

Suppose the management of such new corporation were transferred to new and strange parties, what would then be the position of the Light CO? They would find themselves in the hands of strangers; the business of manufacturing lamps, which is the most vital part of all our operations, possibly in the hands of incapable or even hostile parties; and the entire business of the Light Co. and of its licensees everywhere, possibly paralyzed, if not destroyed. The Light Co. should be reluctant to accept this change, without adequate guarantees. Mr. Edison, however, gives good reasons why the change should be made.

I have suggested that this change be made. Mr. Edison and his present associates should put their stock in the proposed Lamp Co., in escrow, to be held there permanently during the continuance of this contract. Mr. Edison, however, objects to this and gives good reasons for his objection.

FOURTH. Under the old contract (second Section) the exclusive license granted to manufacture lamps was to continue only during the life of patents on Mr. Edison's inventions, and upon his alone. The new contract (fourth section) differs from this. It makes the contract continue not only for the life of Mr. Edison's patents, but also for the life of any patents of outside people which the Light Co. may come into possession of; and also the life of licenses under patents of outside people, which licenses the Light Co. may acquire.

Regarding this change, my first opinion was that the life of the contract should be limited to the life of the Edison patents, namely, those of Mr. Edison's own inventions. But there seems to be a good reason for allowing this change to be made. It is that the new contract provides that whenever the Lamp Co. takes a license from an outside party they must give the Light Co. the benefit of such license, and the right to a sub-license; and the Lamp Co. claim that if they are thus to give the Light Co. the benefit of their license, they are fairly entitled to a reciprocal favor, of similar nature from the Light Co.

FIFTH. The present price of the lamp (35 cents) is found in the third section of the existing contract. In the proposed new contract, the proposed price (40 cents) is found in the fifth section. I have compared these two sections and make the following comments.

(A) The old price for a lamp was not to exceed 35 cents. The New price is 40 cents.

The lamp is costing more than Mr. Edison anticipated, consequently the price should be increased to this reasonable extent. I approve of this reasonable increase.

(B) The existing contract (section third) required lamps to be furnished to the Light Co's licensees "within the United States", at 35 cents. The new contract (section fifth) removes this territorial restriction, and provides that lamps shall be supplied at 40 cents, "to all licensees of the Light Co." As matters now stand, that would mean any licensee in either North

or South America.

This is a concession in favor of the Light Co.

(C) The existing contract (sections one and three) provides that the lamp thus sold for 35 cents is "the incandescent lamp now or from time to time used in connection with the Edison system". That is clear and easily understood. It means every incandescent lamp, without exception. no A dent, See old Contract But the proposed new contract changes this and greatly narrows it. This change of course results from the experience and practical knowledge gaindd in actual business since the date of the old contract. What is the lamp, the price of which is to be 40 cents? The new contract defines it as follows, namely,

(1) It shall be a standard lamp.

(2) It shall not be of more than 16 candles power.

(3) It shall not be more than 140 ohms resistance.

I have no objection to this change, provided the meaning of the word "standard" can be placed beyond dispute. To that end, I suggest that not only shall drawings, of the lamp be filed with the Light Co. as is provided for, but also that the new con-

tract be so amended as to provide that on the date the new contract is signed, six of the then standard lamps, referred to in the contract as standard, shall be deposited in some safe place, by the mutual consent of the Lamp Co. and the Light Co., for the purpose of showing, for all future time, what was meant by the word "standard." I am now informed that Mr. Edison consents to this.

(D) Under the existing contract, packing and boxing are included in the price, 35 cents. Under the new contract, the "cost of boxing and packing" are not included in the 40 cents, but are to be additional charge. Thus not only is the price of the lamp increased 5 cents, but boxing and packing are made an additional charge, to still further increase the price of the lamp. I think this change from the old contract should not be made. Let it stand as it is now. Let the round price, 40 cents, include packing and boxing.

I am now informed that Mr. Edison is willing to waive this claim for extra compensation for packing and boxing and is willing to have the round price include those charges.

(E) Under the new contract there is no charge for cartage to the railway station. In this respect, the new contract remains the same as the old one.

(F) The old contract provided that the price of lamps should be reduced whenever the improvements in manufacturing made a "reduction possible". The new contract changes this. Under the new contract this reduction is to be made, not whenever possi-

4 - Profit sold at lamp actual cost

5	35	5½	39	33½
5½	34	6	38	32
6	33	6½	37	30½
6½	32	7	36	29
7	31	7½	35	26½
7½	30	8	34	25
8	29	8½	33	23½
8½	28	9	32	22
9	27	9½	31	19
9½	26	10	30	17
10	25	10½	29	
10½	24	11	28	
11	23	11½	27	
11½	22	12	26	
12	21			
12½	20			

2

12

ble, but whenever both parties consent to reduce. Under the old contract, the Light Co. pledged itself to make a reduction whenever possible. Under the new contract it declines to make any reduction unless it chooses to. That is to say, not only may a reduction be possible, and not only may the Light Company wish it to be made, still it will not be done unless the Light Co. chooses to agree to do it.

I think that inasmuch as a profit of 5 cents a lamp is secured to the Lamp Co. in any event, the question of a reduction of price in the lamp should not be a matter of "agreement". But under the new contract, the Lamp Co. is entitled to a profit of 5 cents a lamp and the profit beyond that is divided equally between the Lamp Co. and the Light Co. Now if the Light Co. is willing to sacrifice its interest in the profit, in order that the price of the lamp may be reduced, I think it ought to have the power to compel the Lamp Co. to make the same sacrifice. Hence I suggest that the Light Co. have power to compel the Lamp Co. to make such concession, provided, of course, the five cents or ratio profit of the Lamp Co. is not disturbed.

My criticism as above has been discussed with Mr. Edison. He thinks that the existing arrangement for profit is none too liberal; also that the Light Co. will have a greater interest in sacrificing this profit than the Lamp Co. will, so that practically the result will be that the Lamp Co's profit would be

limited to the exclusive profit; and he further thinks that if the Lamp Co. is not secured in this additional profit, which arises from reducing the cost of producing the lamp, the Lamp Co. will have no stimulus to reducing the cost of production, a matter which is very vital. In view of these arguments thus stated by Mr. Edison, my own opinion is that the new contract had better remain as proposed, and that the question of reduction should be a matter of mutual agreement.

(G) The new contract reserves to the Light Co. the right to charge more than 40 cents (or whatever the ratio selling price may be) for lamps sold to licensees and others. The profit thus derived is not to be divided with the Lamp Company, but the Light Co. gets it all. In this respect, the new contract corresponds with the existing contract, and is of course satisfactory to the Light Co.

(H) Regarding lamps of more than 16 candle-power, and of higher resistance than 140 ohms, and of more than the "standard" economy, &c., the new contract provides that the prices shall be so fixed that the Lamp Co. will receive no greater ratio of profit than it reserves on the "standard" lamp, price 40 cents.

My reading of the New contract is to the effect that as regards these lamps which are outside of the present standard type, the price is to be fixed so as to secure to the Lamp Co. "exclu-

sively" a profit. But no profit is secured to the Light Co. I object to this. Let the new contract be so changed that, as regards these novel lamps, the Lamp Co. shall have its exclusive profit of five cents, or other ratio profit; but that as regards any profit in excess of such ratio profit; it shall be divided between the Lamp Company and the Light Company.

Mr. Lowrey, with whom I have discussed the above, states that there is no intention in the new contract to deprive the Light Co. of its shares of profits, as feared by me. Mr. Edison states the same thing. So my above criticism will be withdrawn as soon as I am satisfied that the new contract is clear, or is made so upon this point.

(I) The new contract provides for an accounting of profits, just as the existing one does. The frequency however is changed. Under the old contract, accountings were to take place the 1st, of January and the 1st, of July. Under the new contract there is but one accounting a year, namely February 1st.

I rather object to this. The requirement of two accountings a year should be continued. In a new business like this, where everything is uncertainty and everybody is feeling his way over new ground, stock should be taken, books closed, and accounts rendered, at least every six months. I think that this is even of greater importance to the Lamp Co. than to the Light Co. Be that as it may, I think the Light Co. should insist upon it, namely, that the accountings should be semi-annually. Let the proposed new contract be amended accordingly.

The new contract provides that statements of sales and collections, also statements of actual cost of lamps, shall be

rendered to the Light Co. the first days of each August and February. I see no reason why the "accountings" as well as the statements, should ~~not be made at the same time,~~ instead of only once a year as above mentioned.

In this connection, note that for the purpose of getting at the profits (in which the Light Co. participate) each period of accounting is taken by itself. That is to say, if the accounting is once a year, the profits are fixed on the business of that year and if they exceed the ratio of five cents a lamp, the Light Co. receives one half of such excess of profits. Each period, be it 6 months or 12 months or any other fixed time, stands by itself, and if the business during that period shows a loss, instead of a profit, such loss is not carried over to the next ensuing period or unit of accounting. For instance, if the business of the Lamp factory for the year 1883 showed a loss of $50,000. and if the business for the year 1884 showed a profit (above the 5 per cent profit) of say $100,000. the loss incurred in the former year, would not be deducted from the profit of the other year. Each period of accounting stands by itself.

With reference to this point, while it may be said that it makes no great difference either way, whether the unit of accounting is six months or 12 months, still everything considered, I think it should be the shorter time, namely, 6 months.

I therefore suggest that the old contract remain as it is in this regard, and that the change in the new contract be rejected. Then accountings will be rendered every six months.

(J) Regarding money sunk by the Lamp factory in lamp experiments &c., it goes into the usual expenses of the business. Consequently, all such losses are deducted, before there can be any profit. That is to say, if the Lamp Co. sinks money in experiments on lamps for foreign markets &c. the expense comes out of the Light Co. to the extent of its profit. Is that right?

Touching my criticism as above, Mr Edison claims, and with much reason, that the Light Co. instead of being injured by the foreign business is benefitted. He states that the larger the production or output of the factory is, the cheaper will be the average lamp. Not only this, but all lamps sent abroad are invoiced at a higher price than lamps furnished us, and consequently, if there is any profit, it goes into the general fund, thereby reducing theprice of our lamps, because in getting at the average price of a lamp all foreign sales are taken into consideration.

SIXTH. Referring to page 11 of "C. D." where a provision is made for starting a new lamp factory, by the Light Co., if the Edison Lamp factory is unable to fill orders promptly, I think that such factory should not be limited by the one year provision, inserted by Mr Edison on page 11 "C. D." If the Lamp

Co. cannot fill all orders for lamps, the Light Co. ought to be entirely free, without restriction, to start other factories. And there should be no conditions which might hamper the Light Company in doing so.

I understand that Mr. Edison is now willing to waive this one year provision, in view of my criticism above. So this is now all right.

SEVENTH. Referring again to the possible inability of the Lamp Co. to fill orders promptly, I observe that Mr. Edison suggests that the question of such inability shall be determined not upon actual orders, but upon actual consumption. That is to say, if the Lamp Co. is not able to make all the lamps that are needed for actual use, then the Light Co. may start a new factory. But if our licensee companies wish to carry a surplus of lamps, and give orders for such surplus say three months in advance, Mr. Edison is not willing to have the inability of the Lamp Co. to fill such orders, to be such an inability as would entitle the Light Company to start an additional factory.

I suggest in this connection, that the test of inability be, first, lamps required for actual use, and second, a surplus stock sufficient, taking the then existing consumption as a basis to last three months. I think some such clause as this should be inserted in the new contract, and that it should not be left as Mr. Edison suggests.

Mr. Edison has considered the above criticism, and states that he accepts it. So this is now all right.

EIGHTH. The new contract provides that the entire amount expended by the Lamp Co., since the beginning of their business, in experimental work necessary to improve the lamp and the methods of manufacturing, it, shall be deducted from the surplus profits of manufacturing, until the same shall have been liquidated. The amount of such expenditure, say to January 1st, 1883, is to be stated on the face of the new contract. In deducting this amount from the profits, it should, however, be observed, that it is not deducted from the entire profits, but only from such portion of profits as remain after the exclusive 5 cents per lamp or in that ratio, coming to the Lamp Co., shall have been deducted.

Is this provision just? As to the amount actually lost in experiments on lamps, provided that amount can be ascertained, I think it may to some extent be just, but I do not think so, as regards money sunk in experiments upon "methods of manufacture". Before this amount is allowed, it should be investigated very carefully, otherwise we shall be paying not only for actual money sunk in experiments (to which I do not so much object) but also for all sorts of mistakes in buying machinery, equipment &c. I do not think this allowance should be made for anything except money actually sunk in experiments upon lamps, and I think the fact of such expenditure, should be clearly shown by the records or books of

the Lamp Co., from the beginning. Otherwise it ought not to be allowed at all.

(Mr. Edison has read my criticism as above, and approves. He agrees that the Light Co. is to be charged not for improvements in methods of manufacture, but simply for experiments on lamps, that is to say, for such a class of work done at the Lamp factory as would ordinarily be done at Mr. Edison's laboratory. So that is all right).

In this connection, let me state that whereas the Light Co. is interested only in North and South America, the Lamp Co. has the entire world for a market. These experiments which the Light Co. is now called upon to help pay for, will accrue to the benefit of all the Edison Companies throughout the world. Of course that will benefit Mr. Edison and his personal associates. Apparently they have recognized this fact. The expense of these experiments and improvements are to be paid in the first instance from ~~the~~ money furnished by the Lamp Co., out of its own pocket. But whenever there are profits, in excess of the exclusive profit of the Lamp Co., those profits should be used to reimburse the Lamp Co., If those profits were not used in that way, they would be divided equally between the Lamp Co. and the Light Co. Con-

sequently, the Lamp Co. contributes one half of the cost of the experiments and improvements, and the Light Co. contributes the other half. The only question for the Light Co. to determine, in this connection, is whether North and South America are to bear one half of this expense as against all the rest of the world upon the other half.

don't remember it bear whole of previous Expense

It seems to me doubtful whether the Light Co. ought to bear as much as one half of this expense, or indeed any of it. Probably one quarter would be more just. But I would not object to bearing some portion provided, first, it applied only to expenses incurred before January 1st, 1883; second, provided the expense related only to improvements in lamps, exclusive of improvements in machinery &c.; and, third, provided the fact and amount of such expense appeared clearly, separate from all other matters, on the records or books of the Lamp Co.

Claim absolutely but after F. Wood.

NINTH. The last section of the New contract provides that hereafter all experiments made by the Lamp Co. under direction of the Light Co. shall be paid for by it. But as regards all experiments made by the Lamp Co. without any order from the Light Co., the Light Company shall bear one half of the expense, the same to be deducted out of its share of the net profits. This brings up the same question that I have discussed in the last paragraph above.

Is this charge against the Light Co. to lap over from one year to another, or is each fixed period or unit (be it 6 months or 12 months) to stand by itself in this regard?

Let the new contract be amended so that it will provide that such experiments made under the direction of the Light Co., must be only those that are ordered in writing by the Light Co.

As to whether the Light Co. should thus pay one half of the Lamp Co's experiments, not ordered by the Light Co., I am in doubt. The Lamp Co. has other customers besides the Light Co. and its interests will extend over the world. It seems to me that the Lamp Co. will probably spend a good deal of money in experiments which the Light Co. would not approve of. Why then should the Light Co. thus pay one half of such experiments? I am not sure that they ought to pay any. Certainly they ought not to pay more than one quarter. And each unit or period of accounting, in any event, should stand by itself without overlaps.

TENTH. The new contract ought to contain a provision guaranteeing its lamps. Our Isolated Co. is now guaranteeing a life of 600 hours for the Edison lamps. What is the result? They buy a vast quantity of lamps from the Lamp factory, pay the full price for them, but many of them do not last 600 hours. In such cases, the Isolated Company has to give away to its customers good lamps to supply the places of these bad ones. It is a very

large item of expense to the Isolated Co. I mention that Co. merely as an illustration. Doubtless other licensee companies will have the same experience.

The new contract should contain a provision guaranteeing a stated life for its various lamps. And the Light Co. should have the right to test this life, not by the experience of its customers (for such a test would be unjust) but in some fair way, such for instance as testing the lamps at the Light Co's own testing room. If the life of the lamps so tested turns out to be less than 600 hours, or such other life as may apply to the peculiar type of lamp tested, the Lamp Co. shall reimburse the Light Co. or its licensees accordingly.

We will guarantee the lamps will tell us how to make the lamps do it always - we will guarantee 8 ½ per hp. lamp. 400 hours or lose all profit on them

ELEVENTH. There should be a provision in the new contract to the effect that the Lamp Co. recognizes the validity of the patents of the Light Co., and their binding effect for the full seventeen years.

Mr. Edison informs me that he gives his assent to such a provision.

TWELFTH. The eighth section of the new contract, which is substantially a copy of the tenth section of the existing contract, does not quite suit me. I refer to the provision for licenses for using other people's patents being acquired by the Lamp Co. In view of the fact that contingencies may arise whereby the [illegible]

by the Light Co. will be entitled to start other people in the

business of manufacturing lamps, I think that this new contract should contain a provision compelling the Lamp Co., whenever it takes a license for an outside patent, to take it in such a manner that the Light Co. may avail itself of it in case of starting additional factories. As the contract now stands, in this regard, the Lamp Co. is morally bound to do the best it can to get such a license, broad enough to cover the Light Company's requirements in all respects, but it is not compelled to do so. I would go so far as to bind the Lamp Co. not to take a license, unless they can get it broad enough to meet this emergency.

(Mr. Edison has read the above criticism and states that he accepts it. He says that if any case arises where it is impossible for him to get a license except for the Lamp Co. itself, he will get special authority from the Light Co. to take such a license).

THIRTEENTH. The Light Co. must not forget that they will have to start lamp factories in other countries in North and South America, besides the United States. For instance in Canada, the Canadian laws require that patented articles must be manufactured on Canadian soil. A provision should be inserted in this new contract, securing all the rights and privileges accruing to the Light Co., touching methods and processes for manufacturing to such outside factories in other countries.

(Mr. Edison has read this and consents to it. He says he will not only do this, but that in getting licenses for the Lamp Co., as provided for in the above section, he will get them for these subordinate lamp companies, such as the Canadian Co. for instance.)

FOURTEENTH. The Light Co. ought really to do all its manufacturing itself, including the manufacture of lamps. If it does not, its business at no very remote period, will be at the mercy of outside manufacturing companies. This is especially true of the Lamp contract. The lamp is peculiarly the vital part

of the Edison system of lighting. The Light Co. ought to control its manufacture. Indeed the Company itself should be the manufacturer. But our Directors do not see their way clear, certainly for the present, to undertake the enormous burden of manufacturing. Still we should surround ourselves with every possible safe guard. I accordingly make the following suggestion, and deem it very important.

I suggest that a clause be inserted in the new contract to the effect that if at any time hereafter, during the continuance of this contract, the Light Co. desires to purchase the factories and business of the Lamp Co., it shall have the right to do so upon paying the Lamp Co. twice the appraised value of its property, the said appraised value to be made by arbitrators, if it cannot be mutually determined upon, provided, however, that said appraised value shall in no event be less than twice the actual cash cost of the said property.

Board

FIFTEENTH. The proposed new contract, which raises the price of the lamp from 35 to 40 cents, allows the Lamp Co. a profit of 5 cents a lamp, whereas the old contract allowed a profit of 3 cents a lamp. After these profits shall have been deducted, for the Lamp Co., the remaining profit, if any, is to be divided between the Lamp Co. and the Light Co. My criticisms on this are as follows:

FIRST. Under the existing contract, the price is 35 cents, and the profit is 3 cents. Under the new contract, the price is to be 40 cents. and the profit 5 cents. The Lamp Co. is now making about 2000 lamps a day, and it has made arrangements for ultimately making 20,000 lamps a day. Before long they will probably make 10,000 lamps a day. Let me figure it out on that basis, of 10,000 a day.

10,000 lamps a day, for 300 days, at 3 cents a lamp, is a daily profit of $300., and an annual profit of $90,000. The present investment in plant at the Lamp Factory is about $180,000. But to increase the output from its present capacity to 10,000 a day, might possibly require the investment to be increased to (say) $250,000. Consequently a profit of 3 cents a lamp, would be 36 per cent per annum on the investment.

10,000 lamps a day, for 300 days in the year, at a profit of 5 cents a lamp is a daily profit of $500. and an annual profit of $150,000. which is about 60 per centum on an actual investment of $250,000.

If the profit is kept at 3 cents, and if the output is 10,000 lamps a day, and if a real profit of 5 cents a lamp is actually earned, the gain to the Light Co., if this 2 cents per lamp profit were divided between it and the Lamp Co., would be

$30,000. a year to the Light Co.

[illegible] licensee to the Lamp Co. Let us also remember that it is exclusive license for the best part of its business, the only or which contains the element of continual renewal. As fast as lamps give out they must be renewed. In view of all the facts, is the proposed increase of profit from 3 cents to 5 cents too much, or not? Let it remain at 3 cents where it is now.

SECOND. What items are to be deducted before profit is calculated? Is the cost of experiments to be deducted? Is increased plant, machinery &c. to be deducted? Are the losses of one year to be carried over to succeeding years? Or is each year to stand by itself, the profits and losses of each year being distributed at the end of that year, without overlapping? Inasmuch as the Light Co. has an interest in Lamp profits, the items which are deducted before profits are computed should be carefully stated in the contract. Let the contract provide for this important point, by stating clearly just what items are to enter into the estimate of profits, that is to say what is to be deducted before profits are arrived at.

1883-01-24

East Newark Jany 24/83

Recd from Edison Lamp Co. 1/2 Doz Experimental Lamps New Style Plating

Martin N. Force

1883-01-26

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS.

Show this to Mr. Eaton

EAST NEWARK, Jan 26 1883

Dear Mr. Edison:

Regarding money matters.

I have been compelled to give two notes at sixty days during the past month to meet drafts made on the Lamp Co.

Chas Pratt & Co. for gasoline	Due March 2	794.82
Ansonia Brass & Copper	March 15	407.87
		$1202.69

These bills were over ninety days old and we could not do otherwise.

Besides these notes we owe

Geo. Place Reg. Agcy.	due Feb. 12	2284.65
Bergmann & Co.		1936.93
		$4221.58

These notes can be renewed

1883-01-26
F.R.U.

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, ... 188

on paying part of principle.

I have offered Morris, Tasker & Co. Phila. a note, which they have not yet accepted for $800.00 in payment for mercury pumps, for which they were going to draw on us.

These notes have all been necessary to meet bills long past dues, and are all in hands not hostile to us, that would renew if we desired taking a partial payment in cash.

We cannot run without money and our lamp sales just make us whole on their cost. All improvements and enlargements must be paid out of outside money.

If we could get the $2306.95

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, ... 188

now due us on the five cents differences, and forty cents on future lamps we should be able to possibly pull through another month and even to turn the corner. This latter point will depend entirely on the proportion that our foreign orders bear to domestic orders, and the size of both.

I do all in my power to keep expenditures down, but find that it takes constant expense to keep everything in repair, and to meet the demands made by an increased production.

The fact that we are in a new business makes our credit very uncertain, and with a large floating debt, it is

1883-01-20
T. A. E. 4

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, ... 188

exceedingly difficult to make both ends meet.,

We are now running the third aisle of pumps and expect to turn out 12.000 lamps to 15 ~~000~~ a week from the three aisles.

We shall return all our scrap platinum and get an equal weight of new. We are now picking it over to save that which can be used a second time. We are very ~~close~~ to our glass supplies. If Corning should refuse us we ~~should~~ have to shut down in less than a week. We have three weeks stock of socket rings ~~and~~ screws on hand ~~hand~~ and ~~have~~ the whole of the last bill.

T. A. E. J.
1883-01-26

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, ... 188

We cannot borrow any money in Newark and are pressed constantly for bills due.

I am going on home tonight. I have just received word that my brother is much worse, and only expected to live a few hours.

Yours Truly
Francis R. Upton.

Dear Mr. Edison,

I am told you may honor these diggings with your presence at a Board meeting to night. if you can spare time to come over to Sixth Avenue to see a sample of my arc lamps on your 55 V. circuit you would do me proud.

Faithfully yours
Otto A Moses.

Jan. 29. 83

1883-01-30

FREDERIC ADAMS,
COUNSELLOR AT LAW,
755 Broad Street,

Newark, N. J. Jan. 30, 1883

Francis Lyman, Esq.

Dear Sir,

The confusion incident to moving my office has prevented me from doing anything more than to jot down the points which give the result of the law as to the taxation of private corporations. I think, however, that it will [illegible] your case. I have given the matter a careful examination.

Yours very truly,

F. Adams.

1883-01-30.

As to Taxation of the Edison Lamp Co.

The real and personal Estate of Every such corporation shall be taxed the same as the real and personal Estate of an individual.

The real and personal Estate of an individual is taxable at the full and actual value thereof and debts bona fide due to creditors residing within this State maybe deducted from the valuation.

The personal Estate, or chattels of the corporation will be assessed where the principal Office is. The real Estate will be assessed where it is situated.

The corporation is taxed for the capital stock at its actual value, and accumulated surplus. The stock is not taxable in the hands of the stockholders.

"Actual value" means market value.

"Accumulated surplus" is the property or fund which the

corporation has in excess of its capital stock, and above all its debts and liabilities.

As there is more actual or market value in the case of a large capitalization than in the case of a small capitalization, the taxation will be greater in the former than in the latter case.

The valuation of the real Estate is to be deducted from the stock and surplus. Rev. S. 1159 & 81. But a recent case makes this doubtful 13 Vroom 35.

Stock may be issued for property purchased, in which case the stock must be so stamped across the face. But the property must be money's worth, or a personal liability is the consequence.

8 Stewart 501

The rate of taxation in Harrison is somewhere between $2.50 and $3.00 on each $100. In Newark it is $2.44. This includes everything.

Newark. Jan. 30. 1883. J. Adams
Atty. at Law.

EDISON LAMP COMPANY

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

11

Upton

EAST NEWARK, Jan. 31, 1883

Dear Mr. Edison,

The fibres dipped in paraffine showed the same as regular. As it will prevent any atmospheric influence on the fibre, we think of using it on the regular.

I will bring full statement of experimental expenditure into Ny. next Monday.

The split 100 c.p. is on its way through.

The Swan lamps showed good record, will send you full account in a day or two.

Yours Truly

Francis R. Upton.

1883-02-01

Monthly Statement

THE EDISON LAMP CO.,

East Newark, N. J., Feb 1st 1883

Thomas A. Edison Esq.

F. R. Upton Advance	27547.27
E. E. & M. Co. "	397.75
Bills due by us	36998.01
	$ 64937.03

Bills due to us $ 19669.77

Lamps on hand Jan 1st	67562	
" Manufd in Jany 1883	33133	
	100695	

Home Sales for month	20735	
Foreign " " "	5912	26647
Lamps on hand Feb 1st 83		74048

Home Orders for Month	50784
Foreign " " "	9412
	60196

Yours truly
Edison Lamp Co.

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

111883-02-07

Upton

EAST NEWARK, Feb. 7, 1883

Dear Mr. Edison:

The twisted fibre lamp has not had a life test yet, as I wanted Howell or Marshall to read candles so that we should be sure that the test was fair. Howell is away for the Howell tests and Marshall returns tomorrow from Canada.

The lamp at 16 candles showed

137 Volts
199 Ohms resistance
124 candles per H.P.

It has no appearance of being a good vacuum. Are you sure that in sealing

1883-02-07

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, ... 188

off you did not get any air into the lamp?

The last lot of Swan lamps at 64 volts varied from 55 to 95 candles.

Their economy at such candle power make is so high as to prevent their use, at such a volt.

The Swiss order makes the future look extremely rosy.

10,000 @ 50 cts = $5000

One weeks work easy.

Yours Truly

Francis R. Upton.

1883-02-07

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, Feb. 7, 1883

Saml. Insull Esq
65 Fifth Ave. N.Y.City.

Dear Sir:

Your letter cancelling the order for 100 C. P. received and contents noted.

Regarding the defective English lamps. What we are now making should give satisfaction. They are doing in Isolated plants in the U. S. Unfortunately for England they ~~take~~ the lamps we made after first starting our factory here. We did not know they were bad at the time, and after we found it out it took

1883-02-07

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, ... 188

us a long time to overcome the trouble.

We think we are solid now and expect to remain so. I gave Johnson a very full letter regarding the matter, a copy of which you will find enclosed.

Yours Truly

Francis R. Upton.

[ENCLOSURE]

1883-02-01

EDISON LAMP COMPANY. Copy.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, Feb. 1, 1883.

E. H. Johnson, Esq.
65 Fifth Ave. N.Y. City.

Dear Sir:

A few facts regarding lamps may be of use to you.

Complaints of arcing.

When we first started making lamps at East Newark we found it impossible to prevent arcing. We spent a large amount of money experimenting and burned up many lamps testing them at high candle power. As a result we now make lamps that show very little of this tendency.

Life of lamps

The lamps made during the summer were not up

[ENCLOSURE]

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

Copy 1883-02-01

EAST NEWARK, ... 188

low the standard as we had green hands in every department. England probably had more than her share of these as we filled the order received last fall mostly with lamps made at Newark. We did the very best we could at the time. The pains taken in making the lamps may be realized when we say that the lamps cost us over sixty cents at that time, as we took every precaution that could be suggested.

England also has lamps of low volts. This fact will also tend to make their lamps run high candle power and show short life. We com

[ENCLOSURE]

Copy

1883-02-3 01

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, ... 188

not send them anything else at the time.

Range of volts

We are now in position to give them higher volts. Most of their Isolated lamps were below 95 V. we can now give them the same range as the Isolated Co.

The lamps we sent them for Central Station use were 106-7-volts.

As lamps are now made the low volts indicate a poorer economy and longer life, while the higher volt indicate a better economy and shorter life.

You understand that we cannot make lamps of any one volt. the best we can do

[ENCLOSURE]

Copy

1883-02-014

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, ... 188

is to make a lamp that will show more of any one volt than of any other.

[illegible] volt [illegible] to [illegible] of [illegible] just the volt he wishes, yet in order that we may not accumulate too large a stock of unused volts, we are compelled to insist on the right to ship the nearest volts we can to an order.

Special lamps

We have now ordered from Japan Bamboo of extra length. When this arrives we feel that we can give 50 and 100 C.P. lamps of long life that will be of the volts wanted at the Holborn Viaduct Station.

[ENCLOSURE]

Copy

1883-02-01

3

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, ... 188

I hope to make a 150 C.P. lamp of about 50 volts that can be used to replace arc lamps. With this lamp a considerable Isolated business can be done using machines already installed.

Small lamps we can make in any quantity desired and at a lower figure than for regular lamps. if they are ordered in quantities sufficient to guarantee the making of the special tools requisite.

Price of lamps

B lamps can be made cheaper than A lamps. If Mr Edison agrees I would like to have you carry a proposition

[ENCLOSURE]

Copy 1883-02-01

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, ... 188

to England to make them for 42 cts (forty two cents) in lots of 25,000 (twenty five thousand)

We shall make a very good B. lamp using a new dimension carbon that we have found gives excellent results.

We have now a 16 candle B and a 12 candle B lamp that we can recommend.

You spoke of an arrangement with Siemens & suggest. Give him for use with his machines the 12 candle B lamp. This will give a most excellent life and about the proper quantity of light. By running over 12 candles there will be

[ENCLOSURE]

1883-02-07.

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST ORANGE, ... 188

margin enough in life and the economy can be increased. If Mr Edison agrees, I would offer them these lamps in lots of 50 000 (fifty thousand) at a time at 42 cts. (forty two cents). This is less than the lamps have cost us during the past six months, yet in large orders I hope to make a small profit on them.

I should like to run the volts of the 12 candle B lamps at about 55 which I think would about suit the Siemens machine.

Life of lamps.

I wish you would explain what is meant by 600 hours

[ENCLOSURE]

Copy

1883-02-01

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, ... 188

average life, and specially call attention to the fact that some lamps will go at once, even if the lamps [illegible] very good.

The record of nearly every Isolated plant in this country has shown that the lamps are as good as the guarantee made by the Isolated Co. and there are numerous instances of 1000 to 1500 hours average life.

Yours truly
Francis R. Upton.

1883-02-14

EDISON LAMP COMPANY

EAST NEWARK, Feb. 14 1883

Lord Bolton
to
Dorfell Esq

Dear Sir:

Will you kindly draft a note to Meade to have us the partition in the office?

Dyer is to try to float our pay-roll this morning.

Yours Truly
L. Crapton

1883-02-28

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor for any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	RECD BY	CHECK
191	La	J	H Paid

Received at FEAREY'S 180 & 182 Market St. Feb 28 1883

Dated New York 28

To Francis R Upton Edison Lamp Co

Harrison NJ

Send to Laboratory by messenger early tomorrow twenty five regular lamps ready for exhaustion

Thos A Edison

Monthly Statement 1883-03-31

THE EDISON LAMP CO.,

East Newark, N. J., Mch 1st 1883

Thomas A. Edison Esq.

G. R. Upton Adance		26051.43
E. E. Ill. Co. "		397.75
Bills due by us		36722.56
		$ 63171.74
Bills due to us	$ 14521.08	

Lamps on hand Feb 1st		74048
" Mfg in February		42933
		116981
Home Dem for month	22967	
Foreign " " "	9570	32537
Lamps on hand March 1st 83		84444

Home orders for month	27875
Foreign " " "	18100
	45975

Yours Truly
Edison Lamp Co. Dyer

East Newark, N. J., Mch. 2nd 1883

113-03-02

Saml Insull Esq
New York

Dear Sir—

If you have a key to fit door in the partition we got from Mercer Park office will you please mail same ~~to me~~ — and oblige

Very truly,

EDISON LAMP CO.

11

Mch. 2. 83

Dr. Ward

1883-03-02

The Dr. dont understand Arc lamps at 65

Answer

27 Walnut Street.

Mch 2 1883

T. A. Edison Esq

Dear Sir. —

In accordance with your suggestion I sent an order to the Edison Lamp Co. through the Edison Electric Light Co. for some incandescent lamps of from one to two candle power and send the enclosed letter in reply. If it will cause you any annoyance to let me experiment with them as I proposed let it stop at once if it is but

allow two in surgical lighting.

Respectfully Yours

Elbridge T. Ward

I will be very thankful for the opportunity to try them if you see fit to push the order through. If they prove a success it will create a large demand for the lamps and the Company alone will reap the benefit — I believe an annual recurring outlay would be the thing although these cells will give a good light —

I have consulted Prof Keyes of N.Y. and Dr. Coleman & Holden of Newark and they think it would be well worth great

1883-03-08

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, March 8 188 3

Dear Mr. Edison:

We are now in full running order so that all departments are good for 12,000 - 15,000 lamps a week according to the style of lamps run.

Our orders on hand and prospective orders will keep us busy until the latter part of April. Then we will have to slack down in work unless we can bring in new orders.

I spoke to Insull yesterday about offering lamps at 40cts. for May and June if ordered in lots of 50.000. We could make money on them as we are now in fine trim.

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

T.A.E. 2

EAST NEWARK, 188

Everything is running in a regular manner with hands in each department that are trained for the work required of them. Holzer has a fine set of glass blowers coming on, we have taken on Germans and married men as far as possible in this department so as to have reliable help. We are very anxious to keep busy until July 1, then we propose to shut down until our fall orders come in, probably for six weeks.

There is no question in my mind that next fall we shall have all the business it is possible for us to do.

With the new village plants, a new station in N.Y., the new styles of dynamo machines,

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, ... 188

the new catalogue of Bergmann, and the renewals that must come from lamps now burning there is no question about demand. Then abroad, England is bound to do some business and the Continent will take a regular amount.

20,000 lamps a week is a large number, but everything points to it next fall. To take good care of this business we must have our trained hands. For example in putting in carbons. Glass blowers that have been with us six weeks can ~~put~~ seal in 30 carbons in the globe a day with a loss of 20%. One of our old hands will put in 240 carbons in ten hours with a loss of less than 4%.

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, ... 188

You know the advantages of running full, it brings down the expenses per lamp very materially.

I have been always very careful to study my orders before launching out, yet now everything points to an immense business next fall, and we need some orders to carry us through to July.

Resistance lamps.

We have on hand

Res	10 cp.	800
Low	"	2775
Old	"	668
High	B	5950
Old	"	6150
Res	"	2300
Old	A	2325
High	"	4575
Res	"	6800
Old	16 cp. B	875
"	32 "	920
		33,938

T. A. E. 5

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON. TREAS'R.

EAST NEWARK, ... 188

These lamps are now entirely dead stock. If we can sell them at any price it would be so much profit to the Lamp Co.

If you could write to your agents abroad they might find uses for them.

The worst part of these is that we are making more constantly.

The W. H. could use a number if proper arrangements could be made with them.

Bergmann might study out a theatre box that would employ the 16 cp. B.

Yours Truly

Francis R. Upton.

11

1883-03-09.

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST ORANGE, March 9, 1883.

Saml. Insull, Esq.

Dear Sir:

The enclosed complaint I have examined into.

The numbers they quote we cannot recognize as anything we have placed on casks.

Our packer has always marked the volts on packages so far as he knows. In future we will use a stencil "Volts" and mark plainly and in good sized figures the number of volts in front of it.

Every lamp is marked with its volt number so far as we can find out.

If the complaint were more specific giving the number

1883-03-09.

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST ORANGE, ... 188

of the package or the date of receipt it would aid us in placing the blame.

We try in every way to pack our lamps in the way that will satisfy the receiver, any suggestions or complaints are thoroughly examined.

Yours Truly

Francis R. Upton

1883-03-14

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, March 14 1883

Thomas A. Edison Esq.

Dear Mr. Edison:

Your inquiry relating to the safety cathes in the lamp received.

I spoke to Holzer regarding the device and he is to try some inside parts made as directed.

The objections to be urged are the following. If the piece is made of lead it would be very liable to melt when the seal is made. If the piece were made of copper it would be apt to pull apart in the manufacture.

In any condition would it be more apt to check an arc than the cut-out now introduced?

Yours Truly
Francis R. Upton

Safety catch relative to the cut-out where that position should be applied

---

3 21883-03-31

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

Upton

EAST NEWARK, March 31, 1883.

Saml. Insull Esq.
65 Fifth Ave. N.Y. City.

Dear Sir:

We have shipped Mr. Batchelor glass sufficient for about 2100 pumps. We have not shipped all as we wished to know the condition of our last shipment when it arrived. If there are no complaints regarding it, we will ship the balance as soon as we receive the glass from Corning. We start work on Tuesday morning.

Yours Truly
Francis R. Upton

1883-04-02

Monthly Statement

THE EDISON LAMP CO.,

East Newark, N. J. April 2nd 1883

Thomas A. Edison Esq.

F. R. Upton advances		30717.97
E. E. Ill. Co. "		397.75
Bills due by us		34765.30
		$ 65881.02
Bills due to us	$ 16986.65	
Lamps on hand Mch 1st		84444
" Manuf in March		64216
		148660
Home Shipments	29406	
Foreign "	19870	49276
Lamps on hand April 2nd		99384
Dazzlee Volts ready for shipment	21709	
Home orders for month	10086	
Foreign " "	14600	24686

Yours truly
Edison Lamp Co.

1883-04-05

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, April 5, 1883

Saml. Insull Esq
65 Fifth ave N.Y. City.

Dear Sir:

Mr. Bradley wishes me to say — that the machine for milling fibres is ready for practical work.

He wishes Mr. Edison to know that he thinks it a practical machine.

I also call your attention to the fact that all arrangements regarding giving Mrs. Bradley Howell & Lawson one per cent in the business, have only your formal notification of Mr. Edison's wish to be communicated

Yours Truly
Francis R. Upton

1883-04-06

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

Upton

EAST NEWARK, April 6, 1883

Dear Mr. Edison:

The month of March we have tried to make a sample month of what we can do if we had orders enough.

In five weeks our accounts show the following totals

We made	Fibres	130.785
	Carbons	101.220
	Clamps	~~88.354~~ 88,322
	Plated	81154
	Glass	77602
	Exhausted	73239
	Socketed	68778
	Tested	68350
	Sold	54088
Have on hand about more good lamps than at beginning of month		10000

We are now in complete order to make 15000 lamps a week, but have cut down our working

1883-04-06

T. A. E. 25

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, 188

force so as to make 10.000 a week or less. Unless you otherwise order we shall run five days a week, and as soon as we have caught up with our orders we shall run only just enough to fill orders as they come in.

Since Jan. 1 our books show that we have sold and rendered bills for lamps amounting to $55.280.

The cost, counting all labor material, interest on loans depreciation 12% per year 45.830

leaving for interest on capital and profits. $ 9.450

This profit and interest has been distributed as follows.

Buildings & Fixtures $ 2.049

Two new furnaces have been made for carbonizing, a room has been completely fitted up

1883-04-06 3

T. A. E.

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, ... 188

for making inside parts, new arrangements made for washing bulbs, new steam pipes run, water carried to carbonizing house and pumps fixed for giving water there in case of fire, plating room enlarged & new exhaust pipe made.

Machinery & Tools $3,201.65

Four new fibre machines constructed, new table for socketing fitted up, Bradley's fibre cutting machines made, hydraulic press fitted up and complete set of dies made for making carbon forms & expensive work) — new field regulator, new tools for glass department, &c.

Necessary for third line	553.00
Platinum wire paid for but not yet received	3,025.58
	8.829,52
Sundry items	520.48
	9450 00

1883-04-30

EDISON LAMP COMPANY.
THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, April 18 188 3

Dear Mr. Edison

Our financial condition is growing worse constantly. Our orders have been extraordinarily light during the past two weeks, and the orders we have in do not cover a very wide range of volts, making our unsold stock larger constantly.

The worst financial feature is the trouble of getting money due us. This is the great stumbling block of the present.

Illuminating Co.	$3872.90
Isolated "	1793.5
Light "	630.25
T. A. Edison Account	2648.78
Resocketing lamps	801
	9745.98

1883-04-30

EDISON LAMP COMPANY.
THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, 188

	$9745.48
Note Isolated Co. not able to discount	2648.78
	12.394.76

This is the credit we give to the various Light Cos.

We owe about $32.000 of which $17.000 is due to the Corning Glass Works. We need about $4.000 for cleaning up sundry bills. We are going on the principle of letting the other fellow walk in regard to small bills.

We have been compelled to give notes from time to time and now have out the following

Due May	8	S. Bergmann	$838.49
	10	Mackenzie & Rittins	145.24
	17	Chas. Pratt.	417.67
	19	Salamander Works	511.44
	26	J. W. Meeker	163.91
Total in May			$3382.80
June	8	Geo. Place	$1305.52
	26	Peter Boyle	425.96
			1741.48

1883-04-30 3

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, ... 188

July 3	Hanover Bros.	$588.86
6	Consolidated Gas for July	914.20
		1403.00
		3382.80
		$1741.48
	Total notes due	6527.28

I have been compelled to give these notes on past due accounts or to be drawn on. I have tried to distribute them as evenly as possible.

We have on hand as assets

30,000 lamps ready for shipment of saleable volts	$12.000
Pt. wire	3.000
Lamps past pump room	4.000
Due us	12.394
	$31.394

against $32.000 liabilities.

This gives us a surplus of all the irregular lamps, stock in process of manufacture, all machinery and tools, buildings and fixtures with nothing against them except capital stock and the

1883-04-30 4

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, ... 188

advance I have made.

Yet, with the present outlook and dull trade, we shall have to have some outside money to bring us through. I confess, I am exceedingly disappointed in the demand for A lamps from Hamburg, Antwerp &c, and from the English colonies and other points. It is below anything my statistics show it should be if they are making constant advances in the same ratio as in the past.

I am going to cut down expenses to as low a point as possible. The greatest cut will be to work days only except that we stop altogether. This will save more proportionally than any other method. By doing this we can keep the best of our help and cut down expenses very materially.

1883-04-30 5

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, ... 188

I am absolutely at the end of my rope regarding advances unless I step in and sacrifice Electric Light securities on the present market.

I believe in the future of the Lamp Co. The money I have loaned I expect to put as a loan as long as you will allow me to. I would like to have a larger interest and am ready to offer $4000. a per cent or $24,000. for six per cent to you. transferring my loan to your account.

Then if you were to make an assessment it would wipe out the remainder and from the other partners we should bring in probably enough money to meet the present without calling on you.

Anyway an assessment of about $10.000 will be needed unless the tide turns before next June.

Yours Truly Francis R. Upton.

1883-04-23.

THE EDISON LAMP CO.,

East Newark, N. J., April 23rd 1883

Mr Upton Esq.

Dear Sir —

The following Newark bills we must pay at once.

M. Ream	73.45
Dishart	13.12
Walker	12.90
Latimer & Co.	23.25
Mackenzie & Co.	149.17
P. Hayden	40.00
Crowell & Co.	100.00
Hayward	46.00
H. Foreman	25.00
Thompson	18.00
J. R. Dayre & Co.	276.68
Hurson & Wilcox	17.15
C. Hall Mfg Co.	81.20
Poland	25.00
Newark Lime Co.	39.27
Chas Smith	39.29
Andquist & Nichol	29.00
Lehigh & Cole	400.00
	$1428.85

These bills are long past due, and we have heard from most of them several times. Beside the Newark bills we have some New York bills about $2500.00 must be paid very soon We have stayed them off about as long as we can.

Yours truly
Philip S. Dyer

111883-0430

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

Upton

EAST NEWARK, April 30, 1883.

Dear Mr. Edison:

The money question is still exceedingly important and our financial situation is growing constantly worse.

We have drawn down our expenses as far as we can practically and run at all. In March when running perfectly full for over 15000 lamps a week we had on 324 hands, quite a number of them learners.

We now have ~~[illegible]~~ 127 hands on our pay roll and run only day time.

During the month of April we have had orders for 7500 lamps only, which is the smallest month for a year, and less than one quarter

1883-04-30
T.A.E. 2

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, 188

of the average for the past six months.

Our books show that you have given us as agent about $1046.xx during the month, and no other help. I have been compelled to put in $1775.00 more as a loan to pay ~~our~~ pay roll and help out on another.

Dyer informs me that over six Newark parties called here in one day to collect the money owed to them last week.

You should make an effort to help us on this ground.

We expect to handle a large business next year and may want credit in doing so. Unless we pay the money that we now owe we shall have great

1883-04-30 T.A.E. 3.

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, ... 188

trouble in getting the credit we desire. Personally I have a great deal of financial pride. I do not owe any money and never have owed any, and hope never to. I am aware that you laugh at such a pride, yet it is born in me. I have loaned money to the Lamp Co. to help their credit, as I feel a personal pride in this company.

Now I ask you as earnestly as I can, that you procure for us $5.000 outside of the money due us for lamps, which we need for pay-rolls and running expenses, so that we can place it into bills by May 2 of this week.

Yours Truly Francis R. Upton.

1883-05-01

THE EDISON LAMP CO.,

East Newark, N. J., May 1st 1883

Mr A. R. Upton

Please find below a memd. of accounts that we have to settle at once.

Newarks		New York &c	
M. Plume	73.45	Vanderbeck & Son	126.38
Dr Hagt	13.12	N.Y. Belting & P. Co.	278.57
C. W. Walker	12.90	Wallace & Son	356.99
Dalmont & Co.	23.25	Patterson Bros	320.33
Mackenzie & Co.	149.52	Cincinnati B & C Co	41.86
P. Hayden	50.00	Dixon Crucible Co.	491.86
Crowell & Son	100.00	Salamander Works	204.40
Hayward	56.00	Fitzgerald	34.00
H. Gutman	25.00	Eglestin Bros	94.83
Thompson	15.00	Cotterspoons Sons	31.50
J. R. Dayton & Co.	276.68	Wm Godfrey	17.14
Hurst & Phillips	17.15	Bing Oil Co.	51.81
C. Hall Mfg. Co.	81.20	J. W. Hassell & Son Co.	62.71
Newark Linen Co.	39.29	A. F. Moore	58.88
Chas Smith	39.27	Sal. Watt Bar Co.	166.65
Andrews & Nichol	29.00	Gillottson & Co.	41.78
C. V. Poland	70.00		
Lehigh Coal Co.	594.88		$2374.68
Carter " "	185.00		
	$1853.73		

The above accounts must be settled at once.

Yours truly

Philip S. Dyer

1883-05-01

Monthly Statement

THE EDISON LAMP CO.,

East Newark, N. J., May 1st 1883

Thomas A. Edison Esq.

H. R. Upton		32242.97
E. E. Ill Co.		397.75
Bills due by us		34078.85
		66719 57
Bills due to us 15747.64		
Lamps on hand April 2nd		99584
" Manufd in "		32275
		131659
Home Shipments	11967	
Foreign "	1036	13003
Lamps on hand May 1st		118656
Saleable rotts ready for Shipment an increase of 16000 Lamps over last month		37690
Home orders for month	6793	
Foreign " " "	1096	7889

Yours truly
Edison Lamp Co.

1883-05-01

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, May 1 1883

Dear Mr. Edison:

Mr. Dowell spoke of a list of pressing bills. I enclose these, are the most important. You should remember that we have not been paying bills for two months except minor ones that we were compelled to pay.

The following notes are coming due this month.

May 8	McKesson & Robbins	838.49
10	S. Bergmann & Co.	1451.29
16	E. P. Bacheus	234.22
16	Salamander Works	511.44
17	Pratt Mfg. Co.	417.67
23	S. J. Meeker	163.91
		3617.02

Yours Truly

Francis R. Upton

1883-05-02

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, May 2 188 3

Samuel Insull Esq

Dear Sir

Enclosed you will find cost sheet for March. This I am confident ~~with~~ shows a cost rather over than under what can be done on making 60.000 a month.

Our ledger shows that we made over $4.000 on sales of lamps during March.

However and notwithstanding our bank balance and immediate liabilities show an unequalled state of dead-broke-edness.

Yours Truly
Francis R. Upton.

1883-05-03

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

F. Upton

EAST NEWARK, May 3, 1883

Dear Mr. Edison:

We are going to make a third 100 candle power lamp and treat it so as to give 150 candles and try it in place of calcium light.

As I think I have recently mentioned money to you, I will only add that we need some extremely. I shall says you are making an effort, yet we have not yet felt the fruits of it.

Yours Truly

Francis R. Upton.

11 1883-05-

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

Upton

EAST NEWARK, May 4 188 3

Thos. A. Edison Agent.
65 Fifth Ave.
N.Y. City.

Dear Sir:

On account of the hot weather the Lamp Factory will be closed during the months of July and August.

If you will notify the users of the lamps, that they may be guided in giving their orders, you will oblige

Yours Truly

Francis R. Upton Tres.

1883-05-04

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, May 4, 1883.

FRUpton

Saml. Insull, Secty.,
65 Fifth Ave.,
N.Y. City.

Dear Sir:

Regarding your remark that we were having all our notes due at once.

I call attention to the list that was sent you a few days since of our notes.

Considering that it has been nearly four weeks since we have paid any notes, I think that the sum due Bergmann and McKesson & Robbins is small.

I shall look to you for the funds for these notes.

I expect to get the interest on the mortgage down stairs and from the Spanish Colonial.

I may be able to get the

1883-05-04

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, 188

pay roll from Hastings, but it is doubtful if I can all.

I was mistaken in saying that ~~Bergmann's note~~ McKesson's note was due May 5, Saturday. It is due Tuesday May 8 and amounts to $838.49

Bergmann's $1451.29

for both of these we shall look to you for funds.

Yours Truly

Francis R. Upton

111883-05-07

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

Upton

EAST NEWARK, May 7 1883

Dear Insull

We must have some money or bust.

Yours Truly
Francis R. Upton.

1883-05-07

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, May 7, 1883

Dear Mr. Edison:

The enclosed statement for April shows plainly the trouble we are in financially.

We ran behind $2.077 during the month increasing our liabilities about $1.000 and decreasing the bills due us about $1000.

Against this we show about 16000 more lamps in stock ready for shipment worth at least $6.000.

Our orders on hand do not take enough range to make the business profitable.

The orders during the month were the smallest for a year.

We need money very badly

1883-05-07

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, 188

as we are having maturing liabilities coming due, and very little money coming in from sales.

We are down to fighting weight, and can keep from running behind in cost of lamps on 6000 a week.

Yours Truly

Francis R. Upton.

1883/105-09

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

Upton

EAST NEWARK, May 9, 1883

Saml. Insull, Secty.
65 Fifth Ave. - N.Y. City.

Dear Sir:

The price of the 100 candle lamps will be, according to instructions, $1.50 instead of $2.50. The price of the 50 candle lamps will be $1.00 in place of $1.50 as at present.

This reduction is made reluctantly as we have been at great expense to make these lamps.

I estimate that we have spent over $2000 for various tools and experiments.

We have special nickel forms, special jaws, special dies for carbon forms, special bulbs, special screws on the casket requiring special dies to make them &c.

Yours Truly Francis R. Upton.

1883-05-10

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

I will stop up Malbrecht at St Petersburgh Russia Ti

EAST NEWARK, May 10, 188 3

Scare of Platinum to 2 Dear Mr. Edison We will get it lower.

Johnson, Matthey & Co. write us that the price of platinum has advanced from 24 shillings an oz. troy to 31/6 or an advance of $1.87 an oz.

This they say is due to the largely increased demands. They offer us up to 2500 oz. for delivery this year at 30/ an oz. if we cable them accepting offer. They strongly advise our doing so as the price will go higher they think. We can take the platinum, when we may need it, before Jan. 1. 1884.

We are well stocked now yet it may be well to follow

1883-05-10

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, 188

advice if we think the demand for lamps will be very large next fall.

This is rough on Maxim!

I shall do nothing in the matter unless you ~~think~~ write me to accept their offer.

Yours Truly
Francis R. Upton.

1883-05-19

THE EDISON LAMP CO.,

RECEIVED
MAY 21 1883
ANSWERED

EAST NEWARK, N. J., May 19 188 3

May 21 188 3

FILE No.

T. A. Edison Esq
New York —

Dear Sir:

Enclosed find sketch of armature core: — essentially a wooden core with 3/4 inch of iron wire (insulated) wound around it. The iron in this form is easily demagnetized; this property and the fact that there is less iron than usual will I think make it unnecessary to raise the brushes as high above the neutral point as is now necessary —

If you think the experiment

1883-05-19

THE EDISON LAMP CO.,

EAST NEWARK, N. J., 188

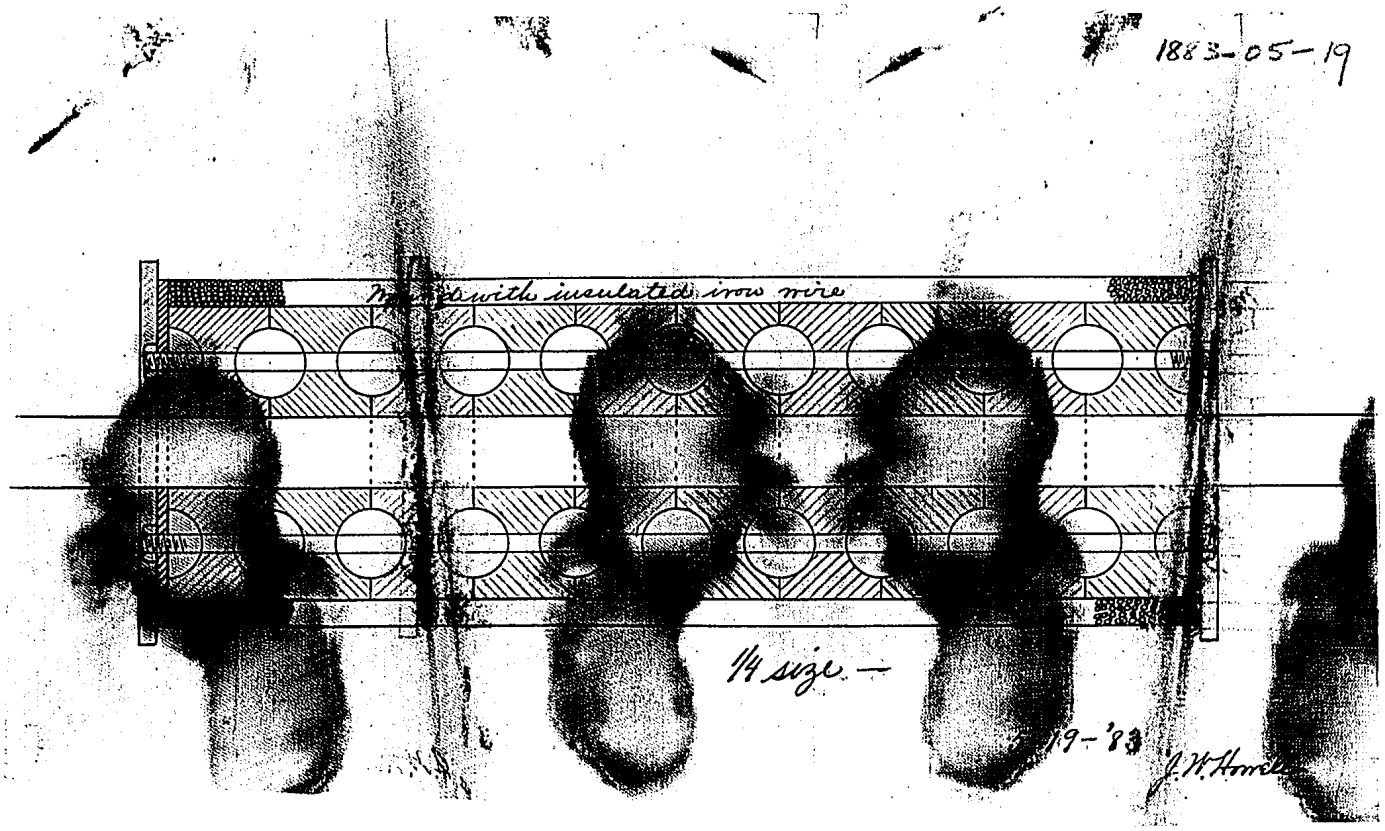
worth trying I would advise embodying it in a H armature as this phenomenon is more marked there than in the smaller machines —

Yours

John W. Howell

[ENCLOSURE]

1883-05-19



1883-05-21

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, May 21 1883

Samuel Insull Esq

Dear Sir:

We have tried a spiral 100 c.p. in a reflector and think that it works well.

The ones we made had too high volts for the Bijou Theatre. We are doing them and hope to have ~~these~~ one or two ready by tomorrow.

Yours Truly
Francis R. Upton

1883-05-23

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, May 23 1883

Dear Mr. Edison:

The bearer Nat. Long has been in our employ three years and we have found him reliable, intelligent and faithful.

He wishes a recommendation signed by you as he thinks it will count for more than one by us.

Yours Truly
Francis R. Upton

1883-05-23

EDISON LAMP COMPANY.
THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

RECEIVED
MAY 24 1883
ANSWERED

EAST NEWARK, May 23, 1883

May 24, 1883

FILE No.

Dear Mr. Edison:

I have been thinking regarding Meters lately.

I think the Lamp Factory should have the making of them and adjusting. We can do it very readily as we have a good machine shop and a tip-top master mechanic. We have every appliance for testing them including brains. We shall be aware first when the lamps change and can make proper provisions for adjusting to the volts ~~reg~~ required.

1883-05-23
E. 2,

EDISON LAMP COMPANY.
THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, 188

When an order comes in for a new plant the meters will need to be adjusted to fit the volts required.

I think Bergmann will be willing to give them up as there cannot be a great profit in them.

If we take them to make we shall endeavor to make them as good as possible and shall standardize them before we send them away.

Yours Truly
Francis R. Upton.

1883-05-25

Write

W. R. POPE,

ELECTRICAL SUPPLIES,

AGENCY
WESTERN ELECTRIC CO.,
New York and Chicago.

131 W. BALTIMORE STREET,

BALTIMORE, May 25 1883

RECEIVED
JUN 1883
ANSWERED

FILE No.

RECEIVED
MAY 28 1883
ANSWERED

FILE No.

Thos Man wants about 1000 lamps for Regt Soldiers to buy from their hats & give to celebrate

Mr T A Edison

Dear Sir

Will you please send me 2 of the small lamps, such as were used in production of the Opera of Iolanthe, and 2 larger ones say double the size, that I may show them to the Committee here, and find out how many we need, so we may order them. After leaving you on Tuesday I went to Mr Bergmann, and up to see Mr Ott, and got an explanation of the Secondary Battery need for the small lights, Please let me know how soon you could furnish from 1000 to 1500 of either kind of the lamps, I will

send him 2 sample the very small ones

1883-05-25

W. R. POPE,

ELECTRICAL SUPPLIES,

AGENCY
WESTERN ELECTRIC CO.,
New York and Chicago.

131 W. BALTIMORE STREET.

BALTIMORE, 188

write to Mr Bergmann for price of Batteries.

Yours Very Truly

W. R. Pope

1883-05-31

EDISON LAMP COMPANY,
THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, May 31 1883

Samuel Insull Esq.

JUN 1883
ANSWERED
.....188...
FILE No.....

We have shipped W. R. Pope four small lamps. I have written him that we can make 1500 in three weeks after receipt of order.

We are now making a number and shall send you some of them. We wish you to have the best.

We have no order for Pope's or yours as yet.

Yours Truly
Francis R. Upton.

883-06-01.

Monthly Statement

THE EDISON LAMP CO.,

East Newark, N. J. June 1st 1883

Thomas A Edison Esq.

F. R. Upton	advance	32488.62
E. E. Ill. Co.	"	397.75
Bills due by us		31711.19
		$64597.56

Bills due ~~by~~ us $16064.98

Lamps on hand May 1st	118656
" Manufd in May	23660
	142316

Home Shipments	21066	
Foreign "	218	21284
Lamps on hand June 1st 83		121032

Home Orders for month	11979
Foreign " " " —	11979

Salable lots ready for shipment an increase of 6598 over last month 44288

Yours truly
Edison Lamp Co.

1883-06-02

THE EDISON LAMP CO.,

East Newark, N. J. June 2nd 1883

Samuel Insull Esq.
New York.

The following is a memd of our unpaid Notes,

April 5th	Geo. Place Mch. Agency	2 mo.	due June 8th	$1315.52/100
" 21	J. E. Smith & Son	2 "	" " 23rd	$208.80/100
Mch 23	Peter Boyle	3 "	" " 26th	$425.96/100
" 31	Howarth Bros	3 "	" July 3rd	$288.86/100
April 3	Cond. Fruit Jar Co.	3 "	" " 6th	[illegible]
" 23	Wm Murray	3 "	" " 26th	$248.86/100
May 1	Patterson Bros	3 "	" Aug 3rd	$344.32/100
" 4	Chapin Hall Mfg Co.	3 "	" " 7th	$82.42/100
" 7	Peter Boyle	3 "	" " 10th	$430.21/100
" 14	G. B. Ludlumm & Co.	3 "	" " 17th	$621.60/100
" 15	Salamander Works	3 "	" " 18th	$207.46/100
" 21	Crowell & Co.	3 "	" " 24th	$101.95/100
" 28	J. D. Crucible Co.	3 "	" " 31st	$499.24/100
				$5989.10

Yours truly
Edison Lamp Co.

Form No. 1.

1883-06-07

16

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	RECD BY		CHECK
318	Tx	W	15 PM	Mu.

Received at 852 BROADWAY.

Dated Boston Mass 7 June 1888.

Thomas A Edison 65 Fifth Ave

Where are our reflector lamps

We are in total Darkness

So to Speak please Answer

Ask Upton if he is make E Hastings

Any more Coiled 100 c p Lamps & if he can

accomplish the object that the theatre people are getting

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

STREET WIRES

Upton: Answer. Hastings potence.

1883-06-13

EDISON LAMP COMPANY.

THOMAS A. EDISON,
PRES'T.
FRANCIS R. UPTON,
TREAS'R.

EAST NEWARK, June 13, 1883.

Dear Mr. Sloan:

I note your information regarding Pot. stations plants. I think the Electric Light Co. should see in accordance with the contract that we receive suitable advances. We are in a tight place for ready money just at present, as we have had no foreign orders and light home orders. We have never expect and count on a large fall business.

Yours Truly

Francis R. Upton

1883-06-13

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, June 13, 1883.

Dear Mr. Edison:

We think that ~~our~~ 100 candle lamps will give perfect satisfaction in a short time. We have made some and found them right. The last shipment we think will be found better than the first, as we have largely gotten over trouble with clamping.

The spiral 100 candle power lamp will be found adapted for side and head lights of ships.

Yours Truly

Francis R. Upton

1883-06-16.

THE EDISON LAMP CO.,

EAST NEWARK, N. J., June 16th 1883

Mr. T. A. Edison
New York

Dear Sir

Lamps on hand (a)
of the following Volts

Hamburg Volts			Central Station		
99	Volts	3.500	103	Volts	4.000
100	"	2000	104	"	2.000
101	"	2600	105	"	2000
102	"	5.000			
		13.100			8.000

London Volts				
106	Volts	2000	Hamburg Volts	13.100
107	"	1500	Central Station "	8000
108	"	1000	London Volts	4500
		4500		25.600

Hamburg & J. B. Holzer

1883-06-19

THE EDISON LAMP CO.,

EAST NEWARK, N.J. January 19th 1883

Paul Insull Esq.
#65 Fifth Ave.
New York

Dear Sir,

In answer to your favor of 14th inst. relative to straight Carbon Lamps for the Geneva Co. We say that the Lamps that go forward to that Company in the future we hope will prove satisfactory in every respect. We are very sorry that they ever had cause to complain.

Yours truly,
Edison Lamp Co.

1883-06-25

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, June 25 1883

Dear Mr. Edison:

Howell has tested 45 103 & 104 volt lamps that have recently been made just as he found them ready for shipment. The average of them all was .754 amperes. In Clarke's blue print 105 volts are given as taking .747 amperes.

I have given orders that all central station lamps in future be tested for both amperes and E.M.F. and that all taking over .80 amperes be thrown out. This will prevent any

1883-06-25

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, ...188

8X17 getting into use.

It strikes me that the tendency will be to have the bills increase in any place from this reason. Lamps using more current are of poorer economy and probably long life. The good economy lamps will give out first and leave these uneconomical ones burning. The tendency will be to have all uneconomical lamps in time. If we ~~could~~ did for example make lamps that would last 20,000 hours and only put one in ten in a short time more than half of all

1883-06-25 3

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, ...188

the lamps would be the 20.000 hour ones.

I shall take my vacation during the first two weeks in July. This will be the first vacation of any length I have had since I have been with you.

Yours Truly
Francis R. Upton.

1883-06-26.

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, June 26 188 3

Dear Mr. Edison:

Regarding enclosed complaint

Regarding packages C.B. 219/21 we never sent any such and know nothing about them.

Regarding the C.B. <1> packages.

We sent you on the day of shipment from the factory a full shipping list and bill in each case. Copies of the same are enclosed. We took great care to carefully weigh each article and to give net and gross weights of packages.

1883-06-26

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, 188

I am personally to blame for any omission in the fullness of the description on the bill. Mr. Dyer recollects distinctly that the original bills were sent the same day as the shipment. We are decidedly chagrined that, after we took extraordinary precautions to follow Mr. Batchelor's instructions to the letter; by some means outside of our control Mr. Batchelor should have failed to receive his notifications.

Regarding the poor packing of carbon.

We sent two plating troughs, in one of which the large carbon forms were packed

1853-06-26.

E.3.

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, ... 188

they were wrapped in tissue paper and packed in saw-dust. The bottom of the other box was placed directly over the full box and was held in place by other articles.

The ~~box was~~ packing case was filled completely and solidly with other material of unyielding nature.

We hold ourselves responsible for the broken forms and will send others to replace them when notified of the number claimed.

Regarding "monthly claim". We have been in business ~~three~~ two years and a half and shipping constantly, in all over 3000 packages

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

E.4.

EAST NEWARK, ... 188

have been sent. We have never received a complaint of breakage of lamps due to poor packing, we have never had a false count specifically brought to us, in no instance have we failed to send shipping lists and bills to you following instructions received from you, in two cases we have had ~~the~~ complaints of false judgement brought to us.

The first was as regards full tubes being packed in a cask conveyance.

The second is the packing of 300 carbon forms.

Mr. Bradley saw the box

1883-06-26
E.S.

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, ... 188

packed and said at the time that he considered it good. The precaution was taken by Mr. Moffett to place two cleats across the boxes holding the forms and to nail them firmly so as prevent any shifting.

I consider that our packer Mellick "has brains over and above what are necessary for his existence", as I have found him an exceedingly trustworthy man who tries in every way to do the best he can.

Yours Truly

Francis R. Upton.

1883-06-28

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, June 28 1883

Dear Mr. Edison:

Your favor of June 26th to hand.

My reasons for going are somewhat different from those assigned by you in your letter.

I have found the present always so very tight for money and the future so very flush, that I thought possibly by dropping two weeks out of the present I could by some chance strike the bountiful future.

Yours Truly

Francis R. Upton

1883-06-29

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, June 29 1883

Dear Mr. Edison:

Are they good? If not you had better mix B. We have on hand a large amount of nickel, in the shape of a large portion of good forms. We feel positive that it might be good idea we shall succeed in use it again. to have Bachelor Can we sell it? We guarantee payment. We have an order on file for 3600 Lamps for Milan. We can ship these from stock, and are willing to risk payment. Have you any instructions?

Mr. Insull has promised to take care of our finances while I am away.

Yours Truly

Francis R. Upton

THOMAS A. EDISON,
No. 65 FIFTH AVENUE.

1883-06-29

NEW YORK June 29 1883

Mr Edison
Dear Sir
Lamp factory should like to know how to exhaust the lamps with or with out current
Yours truly

1883-06-29

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, June 29 188 3

Saml. Insull Esq

Dear Sir:

We have due us down stairs.

Illum. Co.	$ 5532 65/45
Isolated Co.	1847
Canada Light Co.	360
Western Co.	232
	7972 10

We expect to put in bills on foreign account for $750
and home orders 250
1000

before Monday.

I want to pay about $1000 in old bills as soon as possible

The most important bill is the Lehigh Valley Coal Co.

for $603 18

1883-06-29

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, 188

This makes

Today	Sundry accts	$1000
Monday	Pay roll	1350
"	Note	588 86
Thursday	Note	914 20
		3853 06.

This amount will carry us through until my return July 17.

You will confer a great favor by showing your skill in financering with small capital.

Yours Truly

Francis R. Upton.

[FROM SAMUEL INSULL?]

1883-07-02

Central Station
— Milan

July 2nd. 3

F. R. Upton, Esq.

East Newark, N. J.

Dear Sir:-

Referring to your favor of the 29th. June, to Mr. Edison, I verbally cancelled the order for 3,500 B lamps for Milan sometime ago. I do not see that there is any use in your sending lamps there, and taking risks as to the payment. I think we can much better afford to keep the lamps here and use them in our home business.

Very truly yours,

1883-07-02

Monthly Statement

THE EDISON LAMP CO.,

East Newark, N. J. July 2nd 1883

Thomas A. Edison Esq.

H. R. Upton	advance	32991.02
E. E. Ill. Co.	"	504.90
Bills due by us		33173.14
		$66669.06

Bills due to us $14357.96

Lamps on hand June 1st		121032
" Manufd in June		33315
		154347
Home Shipments	10881	
Foreign "	1650	12531
Lamps on hand July 2nd		141816

Home orders	13644	
Foreign "	3500	17144

Saleable Lots ready for Shipment 52320

Yours truly
Edison Lamp Co.

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRESIDENT,
FRANCIS R. UPTON, TREASURER.

1883-07-02

EAST NEWARK, N. J., July 2nd 1883

Statement

January 1st 83 to July 2nd 1883

Lamps on hand Jan 1st		67562
" Mfg to July 2nd		229532
		297094
Deduct Lamps sent to be Relamented		13600
		283494
Home Shipments	127375	
Foreign "	48546	175921
Lamps on hand July 2nd		107573

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRESIDENT,
FRANCIS R. UPTON, TREASURER.

1883-07-02

1

EAST NEWARK, N. J., July 2nd 1883

Stock Account

Arms	14600-015=	219.00	
V. Parts	35547-03 =	1066.41	
Fibres	185485-013 =	2411.30	
Carbons	68676-03 =	2060.28	
Plating	2832-08 =	226.56	
Glass	4472-16 =	718.52	
Exhaust	23160-25=	5790.00	
Socket	2224-28 =	622.72	
Testing	526-30=	157.80	
Packing	107564-35=	37647.40	# 50916.99
Bamboo		1000.00	
Platinum		2159.92	
Glass Unpacked		2000.00	
Crucibles Solution Gasoline Coal Sockets Ring etc		2000 00	# 7159.92
Real Estate	26898.52		
Build Fixtures	31089.08		
Mch Tool	44153.79		
Mercury	2000.00		# 104091.39
Cash Items			
Edison Co's for Lamps		6349.24	
T. A. Edison Agent		673.65	
Fund a/c		329.38	
Cash on hand		1245.51	
		8598.29	
Wm Holzer		4890.34	# 13488.63
			# 175656.93

Jan. 1, 1883, $30,117.86

1883-07-02

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRESIDENT,
FRANCIS R. UPTON, TREASURER.

2

EAST NEWARK, N. J., _____ 188

We have Orders for
Foreign Shipment

415	Lamps	@ 1.50	622.50	
1192	"	" 1.00	1192.00	
1000	"	" .60	600.00	
300	"	" 1.00	300.00	
250	"	" .50	125.00	# 2839.50

U.S. Shipment

33	Sp Lamps	@ 1.50	49.50	
49	"	" 1.25	61.25	
1050	"	" .60	630.00	
9225	"	" .40	3690.00	
300	"	" .25	75.00	# 4505.75
				# 7345.25

We have already shipped
since we started in 1880
416604 Lamps

There are now running estimating
roughly

50 000	Lamps in the	U.S.
7 000	" "	England
20 000	" "	Continent
4 000	" "	other Countries
81 000	Total	

1883 08-02

3

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRESIDENT,
FRANCIS R. UPTON, TREASURER.

EAST NEWARK, N. J., _____ 188

Cash paid in by Trustees	163011.41
" " " F.R. Upton	32991.02
Lamp Sales 1880 to 1881	13175.29
" " Jan to June-82	35208.08
" " June to Jan-83	56021.44
" " Jan to June-83	78815.49
Total Cash handled —	# 379222.73
Liabilities	# 33678.04
Total	# 412900.77

Lamps Sold	# 183220.30	
assets	175656.93	
	# 358877.23	
* Loss since starting.	# 54023.54	
		# 412900.77

* On Jan. 1 1883	# 83542.72	
	54023.54	
Showing gain	29519.18	
Holiday	4,895.34	# 24.628.84

This takes all our assets as saleable, which, if business is good, is fair to do.

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRESIDENT,
FRANCIS R. UPTON, TREASURER.

1883-08-02

4

EAST NEWARK, N. J., _____ 188

Liabilities

F. R. Upton	$2991.02	
Edison Co's	$100.27	$38091.29
Bills due July	4131.62	
" " Aug	5189.66	
" " Sept	6274.03	
" " Later	13032.46	$28577.77
		$66669.06

Corning Glass Works	7654.[illegible]
Vanderbilt & Son	126.[illegible]
Del & Hudson Canal Co.	356.[illegible]
Bills Payable	16613.[illegible]
E. P. Barlens	147.64
Cond. Fruit Jar Co.	99.80
J. D. Crucible Co.	725.[illegible]
Gas-Works	122.[illegible]
Pratt Mfg. Co.	293.[illegible]
J. R. Sayre Jr. & Co.	381.[illegible]
Lehigh Valley Co.	603.15
H. B. Lindermann & Co	127.26
Watts Campbell & Co.	102.82
Small bills	1220.67
	$28577.77

Jan. 1, 1883.

F. R. Upton	27.021.62	
Edison Co.	11.042.08	
		38,063.70
Outsiders		27.940.44
Total Jan. 1, 1883		66.004.14

1883-07-06

Copy of letter to Upton

6th July 1883

472

J. R. Upton Esqr
Edison Light Co
Newark N.J.

My dear Upton,

In your letter to me of 11th May – page 4 – you gave me a list of your regular sized filers; you subsequently sent me 200 or 300 of each size of which there is one that is 6¾ × 1000 × 11/100 another 8¾ × 1000 × 10½/1000. These filers you set to your candles must be that size & that they are what you use or is your letter right?

Notice also that the 10 candle filers are 6½ × 10½/100 instead of as your letter says 6½ × 9¼/1000. The 100 candle filers you sent me are 13 × 75 instead of 12 × 70 as your letter says. Is this right or do you want to take off some old stock you have made a mistake in? because there is a considerable difference in sectional area.

You have sent me some 4 × 11 × 28, what are these? You do not mention them in your letter.

Yours Muybridge

1883-07-06.

I have made an Order [illegible] to the Lumber Co. for 80,000 pieces [illegible] to bill [illegible] the time I am making my remarks. [illegible] pieces you sent me [illegible] differ from the figures given me in [illegible] letter that I mentioned I shall get a lot of [illegible] I cannot use.

Yours truly

1883-07-09

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ELECTRICITÉ

Grand Diplôme d'honneur 482

PARIS 1881

Ivry-sur-Seine, le 9 July 1883

5, RUE DU PARC.

T. A. Edison Esq.
65 Fifth Avenue
New York

My dear Edison,

In reply to your question whether Sprague sends me curves I would say No! he does not and what is more, all the curves he gave me in London are absolutely worthless because he never gave me any also never gave me a curve later than 14th October 1882 which is 8 months ago.

Very truly yours
Cha Batchelor

Upton
Return
after personal
Study

E.S. Upton

4.

July 6 '13
Alexis Batchelor
Francis R Upton
not sending curves

Let Upton
Keep this
Day File
Batchelor Card

5

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

1883-07-12

EAST NEWARK, July 12th 1883

Samuel Insull Esq.
New York

Dear Sir:-

Yours of the 5th inst. rec'd. In reply would say that we have never experienced any difficulty in using the 100 C.P. Carbon Forms. We shipped Mr. Satchelor our best stock & consider them far superior to the Nickel forms in every respect. Mr. Satchelor remarks about our Fibres being unequal somewhat perhaps and I immediately gave the matter to the young man in charge & found our Fibres OK in every respect.

Yours E. Lamphere
Wm Holzer

1883-07-17

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, July 17 188 3

Saml. Insull Secty.

Dear Sir:

Your of 5th inst. to hand.

The carbon forms as first made warped in baking. We gave Mr. Batchelor the best we had at the time. We can make them straight at present.

If Mr. Batchelor would like to buy some nickel forms we will sell him new ones that have never been in the fire for $1.50 a pound, which is less than the sheet

1883-07-17.

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, 188

nickel coats.

Holzer has investigated the size of fibres and has found no discrepancy. The micro guage in Mills room to my knowledge comes to the dot every time on fibres taken at random from those now cutting.

Batchelor's curves are not up to ours. For money we can have as pretty a sheet as his. I do not like the absence of heavy vertical lines.

Yours Truly

Francis R. Upton.

1883-07-17

EDISON LAMP COMPANY.
THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, July 17 1883

Dear Mr. Edison:

I do not think it wise to employ men that know the value of knowledge gained, as this applicant would.

Yours Truly
Francis R. Upton.

1883-07-17

EDISON LAMP COMPANY.
THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, July 17 1883

Dear Mr. Edison:

I shall make a full investigation of the conditions involved in making special lamps for the Central Station and will report to you the results.

Yours Truly
Francis R. Upton.

1883-07-20

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, July 20 188 3

Samuel Insull Esq.

Dear Sir:

Regarding Mr. Batchelor's letter.

— The test of the Swan lamps shown in the letter of July 2, is not favorable to the Swan lamps. The economy at 16 c.p. is given as 7.9 per H.P. and the average life is only 575 minutes. This is about the same as the poorest we have ever made.

— Regarding pump room report. His per cent given of breakage if it includes everything taking receipts to judge from is about the

1883-07-20 E.2

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, 188

same as ours. If it is the number actually put on the pumps it is more than ours slightly. His classification of breakage is all right. We are keeping a similar list to compare with his. We have now as small a breakage as we have ever had. We find that we can only watch every point in manufacture and if there is any more breakage than usual take special care. With good cartons and good glass and glass work, the breakage in the pump room is as small as we can ask for, as the men there are careful.

Regarding the variation in the age of our fibres.

1883-07-20 3
E.

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, ... 188

There may have been an error in giving him $\frac{8 \times 14\frac{1}{4}}{1000}$ instead of $\frac{8 \times 13\frac{1}{2}}{1000}$. It is not a material error. I think that the fibres are cut very close now to standards.

— Regarding the size of fibres. The sizes sent him of 50 and 100 candle power lamps were expressly mentioned as experimental. We have found the utmost difficulty in standardizing lamps owing to the various carbonizations.

Howell has carefully gone through the sizes of fibres before and after carbonization.

Mr. Batchelor is right, according to our measurements in his discovery that the shrinkage

1883-07-20
E. 4.

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, ... 188

in length is different in degree from the shrinkage in width and thickness. Yet we are unable to ~~judge~~ find any marked difference in the shrinkage in width and thickness.

We work more to the candle per H.P. in proportioning lamps, yet as you will see from Howell's table that the surface bears a direct relation to this.

Yours Truly
Francis R. Upton.

1883-07-21

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRESIDENT,
FRANCIS R. UPTON, TREASURER.

EAST NEWARK, N. J., July 21 1883

Samuel. I would like

Dear Sir:

The letters of Mr. Batchelor are having careful attention. I want to have one or two experiments made before deciding regarding them.

Yours Truly
Francis R. Upton.

1883-07-23

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, July 23 188 3.

Dear Mr. Edison,

The enclosed statement shows our financial standing.

We have practically taken in no money except from lamp sales and my loan, and we owe the same amount July 1, as on Jan. 1.

This gives us all the improvements we have made in our Buildings and Fixtures, Machinery and Tools, and increase of stock for profit. We have paid our taxes, interest on my loan, interest on mortgage, and charged depreciation at 12% per annum on Buildings & Fixtures, and Machinery and Tools as an expense in our lamp account.

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, 188

Yet we have no cash and are struggling from hand to mouth to meet every little payment that we make.

Yours Truly,
Francis R. Upton.

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, July 24 188 3.

Saml. Insull Esq.
65 Fifth Ave. N.Y. City.

Dear Sir:

We are very badly in need of money. Our orders are exceedingly badly assorted and bring in shipments slowly. We are compelled to make so many unsaleable lamps on present orders, that we are very tight for money.

For example we are behind our orders for A. lamps on 97 and 98 V about 1200 lamps and have no orders except for these volts on this cut.

We have an order in for 1000 10 cp. lamps for S. R.

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, 188

We cannot touch it except with about $\frac{1}{15}$ of the 10 c.p. lamps made.

We are thus practically without orders. This means that you will have to furnish us with the money for running.

I wanted to shut down, Mr. Edison decided no, and agreed to become responsible for our pay-rolls. If you can raise the money, I think by all means it is best to keep going as the indications are that by Sept. 1 we shall have orders to clear us, and bring in a handsome surplus.

I am fairly at the end of my resources. We pay no

9. 3.

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, ... 188

bills except old ones.

During the next two weeks we shall probably have to call on you for $2500 outside of lamp sales.

Yours Truly
Francis R. Upton.

1883-07-27

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, July 27 1883

Saml. Insull, Secty.

Dear Sir:

Following is the list of notes due in Aug by us

Aug.	3	344 32
	7	82 42
	10	430 21
	17	621 50
	18	207 46
	24	101 75
	31	499 24
		2286 90

These notes were all contracted last may. These with pressing bills will make $3750 to praise in Aug. outside of payrolls

We have for a fund to draw on the following list

1883-07-27
J. 2

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, 188

Illum Co.	4193 60
Bergmann Co.	40 50
Isolated Co.	3145 60
T. A. E. Agent Net	750
	$8129 70

I do not see my way out of the hole unless we have some heavy orders during the coming month.

I intend to close down the whole factory if we have no orders as I do not dare risk running full time. We are now carrying a very heavy stock, that will enable us to fill many orders without making more lamps.

1883-07-27
9.3.

EDISON LAMP COMPANY.

THOMAS A. EDISON,
PRES'T.
FRANCIS R. UPTON,
TREAS'R.

EAST NEWARK, ... 188

Corning has just accepted another six months note on an account over two months old.

Yours Truly
Francis R. Upton.

Monthly Statement 1883-08-01

THE EDISON LAMP CO.,

East Newark, N. J., Aug 1st 1883

Thomas A. Edison Esq.

F. R. Upton	advance	33275.59
E. E. El. Co.	"	504.90
Bills due by us		34480.70
		$ 68261.19

Bills due to us $16814.57

Lamps on hand July 2nd	141816
" Mfg in July	16481
	158297

Home Shipments	14336	
Foreign "	2295	16631
Lamps on hand Aug 1st		141,666
Home Orders	6744	
Foreign "	950	
	7694	

Yours truly
Edison Lamp Co.

1883-08-06

FROM

THOMAS A. EDISON,
No. 65 FIFTH AVENUE,
New York, Aug 6th 1883

TO

EDISON LAMP CO.,
MENLO PARK, N. J.

Foreign Order No. 172

Gentlemen

Please Ship through Hayward Perry & Co Franklyn.

1000 – 8 Candle Power Carbons
1000 – 10 " " "
1000 – 16 " " "
1000 – 32 " " "

These Carbons are to be of the latest Carbonization, Isolated Economy.

Will forward Shipping directions as quickly as possible

Yours truly,

Thos A Edison

(176)

1883-08-15

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, Aug 15 1883

Dear Mr. Edison:

The enclosed memo. shows that you owe the Lamp Co. $1847.21 for Lamps shipped.

We need $1200.00 this week

Today		$400.00
Friday	Note	600.00
Saturday	Note	200.00
		1200.00

Friday Aug 24	Note	100
" Aug 31	Note	500
		1800

On Saturday Sept. 8 we expect to need $2500 for Carning. We shall undoubtedly have bills in for more than this amount before

1883-08-15.

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, 188

this date as we have orders in for $1750 now, which we shall be able to ship.

If the N. S. Cos. pay us our bills promptly we can meet our pay rolls until Sept. 12, without calling on you.

We desire that you see that we have the moneys mentioned on the dates indicated.

Yours Truly
Edison Lamp Co.
F. R. U.

1883-08-18

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, Aug 18 1883

Dear Mr. Edison:

In reply to yours of Aug. 17.

We understand that the orders for fibres and carbons are separate. Mr. Batchelor wrote us a letter saying that he should order 30.000 fibres, which is about the number covered by the two orders.

I distinctly understood you and Mr. Insull to say, that we should write to Mr. Batchelor and quote prices, and that you would send us the orders without quoting the price.

You also criticised the prices of the larger fibres.

1883-08-18

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, 188

We revised our price list and quoted these at a lower figure

	fibres	carbons
B	2 1/2 cts. each	3 1/2 cts. each.
A	4 " "	5 1/2 " "
32 c/p.	5 " "	6 1/2 " "
50 c/p.	5 1/2 " "	7 1/2 " "
100 c/p.	6 1/2 " "	9 " "
10 c/p.	5 " "	7 " "

I have reduced the price of carbonizing below cost, if he pays the price of the fibres, so as to tempt him to have his carbonizing done here.

I have kept up the price of the regular A and B as the order is mostly for these and reduced the price of the larger fibres so as to be very low.

Yours Truly, Francis R. Upton

1883-08-22

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRESIDENT,
FRANCIS R. UPTON, TREASURER.

EAST NEWARK, N. J., Aug 22 1883.

Dear Mr. Edison:

We think we should receive the orders for the fibres and carbons from Batchelor. We are working on the orders in anticipation of receiving them, ~~and~~ as the orders state nothing regarding price we are not limited in the price.

Yours Truly
Francis R. Upton.

Would you Kno not

Thos

1883-08-25

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRESIDENT,
FRANCIS R. UPTON, TREASURER.

EAST NEWARK, N. J., Aug 25 1883

Saml. Insull Esq
Dear Sir:

We expect to bill about $1250- to Antwerp next week.

This will make you owe us about $4000.00 or enough to pay all our notes until Sept. 27. If Canning accepts the note, just sent them, we expect to pay out nothing except to meet notes and pay-rolls next month, unless we have some large orders to warrant us paying bills.

The orders from the Isolated Co. should about meet our pay-rolls.

Yours Truly
Francis R. Upton.

1883-08-25

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRESIDENT,
FRANCIS R. UPTON, TREASURER.

EAST NEWARK, N. J., Aug 25 1883

Samuel - I would say.
65 Fifth Ave. N.Y. City.

Dear Sir:

The following is a list of the sums due us today:

Illuminating Co. N.Y.	$4923.65
" " Sunbury	104.85
" " Lawrence	75.85
Isolated Co.	1319.45
Edison Light Co. Canada	279.41
" " " Chi. test	140.07
" " Rensselaer	965.69
Bergmann & Co.	40.50
Thos. A. Edison Agent	3131.31
	10,980.28

Yours Truly
Edison Lamp Co.
F R Upton.

1883-08-27

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRESIDENT,
FRANCIS R. UPTON, TREASURER.

EAST NEWARK, N. J., Aug. 27, 1883

Dear Mr. Edison:

The enclosed lists show our financial standing. As stated in my letter of Aug. 25, to Mr. Insull we shall be able to get along by meeting our payrolls and notes during the coming month. I hope that orders will come in sufficient quantities, to warrant us in paying coming in cash and to meet all liabilities without using any more notes in the future.

We have gained $2000 this month on our bills so far.

Yours Truly
Francis R. Upton

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRESIDENT,
FRANCIS R. UPTON, TREASURER.

1883.08.31

EAST NEWARK, N. J., Aug 31, 1883.

Answ

File

Dear Mr. Edison:

In reply to ~~your~~ letter of Aug. 30.

If we can control the foreign trade by any reduction in the price of the lamps, down even to our present cost, I am strongly in favor of it.

First comes the fact that we can make the lamp cheaper in large quantities than in small. For example in March 1883 making 54,000 lamps the cost per lamp was 29.3 cts.

In July 1883, making 14,282 lamps the cost was 45.4 cts.

If we could have orders for 100,000 a month the cost I feel sure would be less than 25 cts.

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRESIDENT,
FRANCIS R. UPTON, TREASURER.

1883.08.31 E. 2.

EAST NEWARK, N. J., _____ 188

In many large mills, I have been informed that they sell certain standard lines of goods at cost, that they may bring down the general expenses on certain lines of goods where they make a profit. The lamp business is almost precisely like the standard fabric business. We make one article in large quantities, by subdivision of labor.

The best offer we can make will be the one suggested by you the present American price, and share the profits below thirty-five cents cost. This will give us five cents unshared and of the balance one half.

The true way to make money I believe is to do so

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRESIDENT,
FRANCIS R. UPTON, TREASURER.

E. 3
1883-08-31

EAST NEWARK, N. J., _____ 188

large amount of business, that your profit will be sufficient selling at a price that parties starting in ~~the~~ a small footing cannot make money at.

The demand from Europe comes exactly at the right time. It is ahead of the demand here and comes in our dull season, so as to give them time to receive the lamps.

If we can get the trade for a few years we will bind them down to so narrow a range of volts as to make it impossible for them to do anything with a new factory and make money.

We shall also have so

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRESIDENT,
FRANCIS R. UPTON, TREASURER.

E. 4
1883-08-31

EAST NEWARK, N. J., _____ 188

large a demand for renewals as to ~~[illegible]~~ bring them wholly in our power. For if we refuse to give them lamps, their business will be ruined.

We shall need very much a larger market in the next few years, as it will take some time for the U. S. to take 100,000 a month. I think it will be three years.

Yours Truly
Francis R. Upton.

100,000 a month is about our present capacity with no new buildings or tools.

1883-09-01

~~Monthly Statement~~

THE EDISON LAMP CO.,

East Newark, N. J., Sept 1st 1883

Thomas A. Edison Esq-

F. R. Upton	advances	32951.04
E. E. Ill. Co.	"	504.90
Bills due by us		31866.29
		$ 65322.23

Bills due to us $22290.76

Lamps on hand Aug 1st		141666
" Manufd in "		21569
		163235
Home shipments	16856	
Foreign "	10375	27231
Lamps on hand Sept 1st		136004

Home orders	19031	
Foreign "	13600	
		32631

Yours truly
Edison Lamp Co.

1883-09-11

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRESIDENT,
FRANCIS R. UPTON, TREASURER.

SEP 20 1883

EAST NEWARK, N. J., Sept 11 1883

Dear Mr. Edison:

FILE NO

Regarding prices to foreign countries:

To any company that will agree to take all their lamps of us for five years from the ~~order~~ signing of contract, I am in favor of quoting 40 cts. per regular 4 and B lamp delivered free of all freight charges at ~~the~~ Hamburg, Antwerp, Genoa and Liverpool. We will also guarantee an average life of 800 hours, using the Sedalia Co. rule.

Yours Truly

Francis R. Upton

1883-09-11

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRESIDENT,
FRANCIS R. UPTON, TREASURER.

EAST NEWARK, N. J., Sept. 11 1883

Dear Mr. Edison:

In view of Mr. Batchelors letter you will telegraph him:

Three hundred dollars Ten thousand fibres confirmed.

We did not consider that his order came under our letter of May 14, yet on reading the letter over more carefully we find that he is right in his view.

We send you a corrected bill amounting to $530.00 instead $633.00.

Yours Truly

Francis R. Upton.

1883-09-12

THOMAS A. EDISON,
NO. 65 FIFTH AVENUE.

NEW YORK, Sept. 12 1883.

Dear Mr. Edison:

In lots of 10,000 lamps I think it best to quote 40 cts. per lamp for regular A and B lamps.

In lots of 25,000 I think best to quote the same price and deliver free in ~~Hamburg~~, Antwerp, Genoa or Liverpool.

Other prices same as in America

~~60~~ 10	candle	lamps	50 ~~60~~	cts
32	"	"	"	60 "
50	"	"	"	$1.00
100	"	"	"	$1.50

Yours Truly

Francis R. Upton.

P.S. Change price of
10 cp. from 60 cts. to 50 cts.
8 cp. B. " 40 " " 35 "
The latter only when 10.000 or 25,000 are ordered ~~all~~ of this kind.

1883-09-21

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRESIDENT,
FRANCIS R. UPTON, TREASURER.

EAST NEWARK, N. J., Sept. 21, 1883

Dear Mr. Edison:

Mr. Hutchinson wants some specimens of bamboo to give away at Louisville. I have informed him that you dislike to give away anything.

We have passed our pay-roll two days, and while writing this note three have come to the office for pay. It's bad work.

Yours Truly
Francis R. Upton.

Don't give any samples

1883-09-28

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRESIDENT.
FRANCIS R. UPTON, TREASURER.

EAST NEWARK, N. J., Sept. 28 1883

Saml Insull Esq

Dear Sir:

We cannot make the 32 c.p. ~~last~~ to endure transportation as well as the other styles of lamps.

We require an order for 5 32 c.p. before shipping.

How about Genoa lamps?

Yours Truly

Francis R. Upton Treas.

Monthly Statement 1883-10-01

THE EDISON LAMP CO.,

East Newark, N. J., Oct 1st 1883

Thomas A Edison Esq.

F. R. Upton	advance	33414.21
E. E. Ill. Co.	"	504.90
Bills due by us		29687.81
		$63606.92

Bills due to us $22708.70

Lamps on hand Sept 1st	136000	
Deduct High Volt Lamps to be Rehandled	32387	
	103613	
Lamps manufd in Sept	26599	
	130212	
Home Shipments 18195		
Foreign " 1850	17045	
Lamps on hand Oct 1st	113171	

Home Orders for month 18731		
Foreign " " " 2300		21031

Yours truly

Edison Lamp Co.

..ork October 1st. 1883

1883-10-01

Thomas A. Edison, Esq.

Brockton, Mass.

Dear Sir:-

Everything is arranged with Mr. Upton about the Canadian Lamp Factory except the carbons. Mr. Dyer and I agree in the opinion that if we send any more carbons into Canada from here we shall destroy the Canadian patents on carbons. I hesitate to do that. Mr. Upton says he would not undertake to make the lamps in Canada unless the carbons were sent there from here. Please give me your opinion on this question, namely, shall we send the carbons from here and destroy the Canadian patents on carbons?

Very truly yours,

President.

Would write Upton & ask him if he could have Lawson go to Canada & put up a furnace & in 3 or 4 Runs he could turn out 25000 Carbons enough to last a year & the Expense would not be very much -

[POSTMARK: OCTOBER 19, 1883. TO ALFRED O. TATE]

1883-10-13

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRESIDENT,
FRANCIS R. UPTON, TREASURER.

EAST NEWARK, N. J., Oct. 13, 1883

Dear Mr. Edison:

I have carefully thought over the conditions involved in the order received recently from England.

In consideration of the proposed use of the Swan lamps to the exclusion of the Edison lamps; I think we should write them, that the terms of the circular letter regarding price of lamps, issued by you last month, will be modified so as to cover orders running over a period of three months.

Yours Truly

Francis R. Upton.

Mr. Edison

Dear Sir:

RECEIVED
OCT 20 1883
ANSWERED
FILE No. 188

What about
Lamps according Broad
Proof sent sometime
ago

Geo P Beck

1883-10-23

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRESIDENT,
FRANCIS R. UPTON, TREASURER.

EAST NEWARK, N. J., Oct. 23, 1883.

Dear Mr. Edison!

The price of frosted lamps has been reduced in all cases to a charge of five cents over the price of lamps unfrosted, no matter how large the order.

We are very sorry that the 32 candle power lamps should break so badly. We will send Mr. Jenks five more to replace the broken ones. We take special pains in packing these lamps.

Yours Truly

Francis R. Upton.

Why don't you pick 1/2 doz Lamps & handle them Roughly in Laboratory to Experiment for different packing

1883-10-25

Sullivan & Cromwell,

ALGERNON S. SULLIVAN.
WM. NELSON CROMWELL.

ISAAC CARRILLO.
WILLIAM J. CURTIS.

Law Offices
Drexel Building, Wall Street,
New York.

October 25th., 1883

T. A. Edison, Esq.,

My dear Sir:-

I am informed by my client Mr. F. R. Upton that he has agreed upon the terms of the purchase of the interest of Mr. McLoughlin, in the Lamp Co.

Upon making inquiry into the legal status of the so-called Company, I was surprised to learn that its affairs were not clearly defined in writing, and that each of the partners depended upon tradition, and the honor of his associates to establish his actual interest in the business; that the personal property was nominally owned by the company, while the real property is in your name, and in case of your death would descend to your heirs; that there is not even a declaration of trust in favor of your associates. The Company is in such condition that the death of any member of the firm would bring with it untold and most undesirable results. Any member of the firm may at present give the obligation of the Company, whether the person who owns a majority of interest or the Superintendent who owns only three percent. The power of the latter gentleman is as great as your own, as he is, in law, the agent for all the others.

It is at present within the power of any member to put the business into the hands of a Receiver with all its attendant evils and disastrous consequences to the individuals in interest, the Light Companies and all concerned.

Moreover I am compelled to advise Mr. Upton, that Mr. McLoughlin cannot deliver any evidence of title. He has nothing which defines his interest, nothing which will avail Mr. Upton in proving what he purchased.

As some action is rendered nesessary to enable Mr. McLoughlin to complete his sale I think it is but simple justice to yourselves and your posterity to place the business in proper form.

1883-10-25

This may be very easily accomplished in two ways; (I.) by organizing a stock Company and conveying all the property, both real and personal to it; (2.) by signing articles of copartnership which shall simply but explicitly define the interests of each; the life of the firm, the powers and duties of each and such other limitations as are advisable.

The first method is by far the best as a stock Company perpetuates itself. If there is objection to this method the second should be adopted at once. There are too many interests at stake and too much property involved to allow a continuance of the present careless methods.

I think these suggestions will commend themselves to your judgment and that you will cooperate with Mr. Upton in putting this matter into shape, and enable him to complete his purchase.

It is probably a familiar principle to you that the sale of the interest of any member of a firm creates a dissolution, so that a reorganization seems imperative.

The reform I suggest will be doing simple justice to yourselves, and will place your great undertaking in a position where the happening of any unfortunate event will not destroy your business or cripple your great enterprise.

Please give this subject your earnest consideration and and advise me at your earliest convenience of your conclusions.

Yours very truly:

W. J. Curtis.

1883-10-27

THE EDISON ELECTRIC LIGHT CO.,
65 FIFTH AVENUE.

New York, Oct. 27 1883

Saml. Insull Esq.

Dear Sir:

The Lamp Co. need in order to meet their pay-roll due on Wednesday and the expenses of the Canadian factory $1450.00 today.

Yours Truly
Francis R. Upton.

1883-10-31

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRESIDENT,
FRANCIS R. UPTON, TREASURER.

EAST NEWARK, N. J., Oct. 31, 1883.

Thos. A. Edison, Pres.
Edison Lamp Co.,
65 Fifth Ave. New City.

Dear Sir:

I have this day received from the Edison Lamp Co. three notes signed by you payable to my order.

#54	Due Apr. 3, 1884	for	$3090.00
55	" July 3, 1884	"	4180.00
56	" Nov. 3, 1884	"	2750.00

The amounts of these notes less the interest is to be deducted from my loan to the Lamp Co.

I shall apply these notes in payment of Maj. Machaughlin for an assignment of his interest in this concern.

Yours Truly
Francis R. Upton.

1883-11-01

THE EDISON LAMP CO.,

East Newark, N. J., Nov. 1, 1883

Thos. A. Edison, Agent.

Dear Sir:

The letter from the ~~Pres.~~ Sec. Société Electrique Edison complaining regarding the life of the lamps has received careful attention

The lamps sent abroad have all been of most excellent quality. The same class of lamps are in use in various places in this country and are giving satisfaction.

We beg leave to call to your attention the well known necessity of good regulation so as to not run the lamps at too high candle power. From a large number of life tests we have established the following table as to the duration of lamps run at various candle powers. This table assumes that ~~a~~ regular 16 c.p. ~~A~~ lamps will last 1000 hours on an average. If the lamps are ~~burned at~~ either lower or higher than ~~the~~ normal candle power the life of

1883-11-01
T. A. E. 2

THE EDISON LAMP CO.,

East Newark, N. J., ... 188

the lamps will be increased or diminished accordingly

If burned at		the lamps will last	
10	candles	5560	hours
11	"	3963	"
12	"	2857	"
13	"	2134	"
14	"	1628	"
15	"	1292	"
16	"	1000	"
17	"	802	"
18	"	651	"
19	"	534	"
20	"	443	"
21	"	371	"
22	"	312	"
23	"	266	"
24	"	228	"
25	"	196	"
30	"	103	"

1883-11-01
T. A. E. 3

THE EDISON LAMP CO.,

East Newark, N. J., ... 188

It should also be remembered that two candles variation in a light is scarcely noticeable.

We have a set of regular lamps now testing at 16 candles and the regulation of the current is very closely watched.

This is the record

12 A lamps taken from regular run set up April 6, 1883. at 16 candles.

First lamp broke after burning 796 hours
Second " " " " 1120 "

16 lamps burning at close of factory Oct. 31 having burned 1773 hours at 16 candles.

These lamps are by no means the best we have made, judging from tests made at a higher candle power, we consider them as poor as any made at that time.

We think the lamps we are making today are more than twice as good as the lamps in this set.

Yours Truly Francis R. Upton

1883-11-01

~~Monthly Statement~~

THE EDISON LAMP CO.,

East Newark, N. J., Nov 1st 1883

Thomas A. Edison Esq.

Jas R. Upton		24471.59
Bills due by us		28296.18
		$52767.77
Bills due to us	$22031.28	
Lamps on hand Oct 1st	113171	
Lamps sent from Packing Room to be Rehausted & broken up	12045	
	101126	
Lamps manufd in Oct	36879 Costing	$8980.34
	138005	
Home Ship'ts	16050	
Foreign "	30400 46450 Bringing	$20037.15
Lamps on hand Nov 1st	91555	
Home Orders for month	14818	
Foreign " " "	27500	42318

Yours truly
Edison Lamp Co.

Form No. 1.

1883-11-07

THE WESTERN UNION TELEGRAPH COMPANY.

NUMBER	SENT BY	REC'D BY	CHECK
249	Cr	6	1 8 Paid

Received at Prov R 27 230

Dated New York Nov 7 1883.

To Saml Insull.

Go Armington & Sims

Lipton wants fourteen hundred dollars

for pay roll Hastings will give

it if you say so reply Quick

Tate.

1883-11-07

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRESIDENT,
FRANCIS R. UPTON, TREASURER.

EAST NEWARK, N. J., Nov. 7, 1883.

Thos. A. Edison, Esq.

Dear Sir:

OK

Mr. Batchelor's letter of Oct. 22 to hand.

We have not slighted foreign orders. We have given them the same quality of lamps that are in use in this country.

We think that we can stand any competition as to quality. I consider that we have given the Paris Co. in the shape of information, what is as good as $50,000. and this is the thanks we get.

In future we hope no information of any kind will be given.

I have just given Holzer

1883-11-07

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRESIDENT,
FRANCIS R. UPTON, TREASURER.

EAST NEWARK, N. J., _____ 188

$200 — for a 10,000 minute ~~answer~~ with the prospects of its making 20,000.

I think it may be well to let the Paris Co. think they are beating us. We want some of their lamps.

Yours Truly

Francis R. Upton.

Tell Batch nothing, he cannot help telling if he knows, is my belief.

1883-11-08

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRESIDENT,
FRANCIS R. UPTON, TREASURER.

EAST NEWARK, N. J., Nov. 8 1883

Dear Mr. Edison:

I demand that definite instructions be given regarding the responsibility in the financial concerns of the Lamp Co, as regards meeting various obligations as they become due.

I am driven to this by the events of this week.

For two weeks I have been preparing to meet the payments that I knew were to fall due this week by hurrying forward all shipments that would bring money, and by not drawing money with the understanding that efforts would be made to give me funds this week.

Yesterday I found that I was completely done for. When I asked Mr. Hastings for

1883-11-08 J. H. E. 2

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRESIDENT,
FRANCIS R. UPTON, TREASURER.

EAST NEWARK, N. J., 188

money, he said that he had it but he had instructions from Mr. I would not to pay any out to any of the Edison concerns until Saturday. On going to Mr. Tait I found that no provision had been made for us on the agency account. This was in the face of the following liabilities not provided for

Wednesday	Payroll	1400.00
Thursday	note	262.21
"	"	2562.50
Friday	Interest	900.00
		$5124.71

This has compelled me to draw my money to cover the coming note for $2562.50 as the check from them is not good for three days. I shall also be compelled to draw my check for the Interest due tomorrow $900.

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRESIDENT,
FRANCIS R. UPTON, TREASURER.

EAST NEWARK, N. J., _____ 188

This is in addition to putting off our pay roll and creating dis-satisfaction among our help.

I had to draw on

Due from Hastings	6280.44
Due from T.A.E. agent	5736.94
	$12017.38

all I was asking for was $2300— as I was willing to take care of the Coming note and we could draw on our bank balance for the small note.

After such treatment I am compelled ask for decided action. I refuse to have anything to do with providing money for running the Edison Lamp Co., unless the following conditions are agreed upon

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRESIDENT,
FRANCIS R. UPTON, TREASURER.

EAST NEWARK, N. J., _____ 188

in writing.

That money due the Lamp Co. from Mr. Hastings is under my control, the same as if the Lamp Co. were an outside Company.

That the money due from T. A. Edison agent be paid without request a definate number of days after ~~receiving~~ the getting of bills of lading.

If these conditions are not complied with you will have to make such arrangements as to relieve me of all financial responsibility as regards collecting money or meeting liabilities.

If these conditions are granted I will become absolutely responsible and personally liable to meet any and

1883-4-9 E. 5.

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRESIDENT,
FRANCIS R. UPTON, TREASURER.

EAST NEWARK, N. J., _____ 188

all obligations incurred in running the business. In case the business grows too fast or runs behind I will also agree to give sixty days notice of the need of additional money.

In case we have funds and you need them, on formal notice to the Lamp Co. to that effect I will agree to do everything in my power to help you.

The amounts of money now at stake here are so large and I am so heavily interested in this company having more than half of all I have invested here, that I am compelled to ask for a decided action on your part fixing responsibility.

Yours Truly

Francis R. Upton

1883-11-15

THE EDISON LAMP CO.,

East Newark, N. J., Nov 15th 1883

J. A. Hayes Esq
Dept
65 Fifth Ave
Dear Sir

In answer to your inquiry of 13th inst we make the following table

75	Lamps	in	Half	bbl	16"	diam	26"	long	25	lbs
100	"	"		Bbl	20"	"	28"	"	40	"
150	"	"		"	21"	"	29"	"	45	"
200	"	"	2	"	20"	"	28"	"	80	"
300	"	"	2	"	21"	"	29"	"	90	"
500	"	"	4	"	21"	"	29"	"	140	"
500	"	"	1	Cask	39"	"	39"	"	190	"
600	"	"	4	Bbls	21"	"	29"	"	180	"
750	"	"	1	Cask	39"	"	39"	"	200	"
1000	"	"	1	"	44"	"	42"	"	300	"

The above weights are about the average.

Yours truly
Edison Lamp Co.

Lamps.

1883-11-28

Mr. Upton,

I wish you would write me a letter giving me the exact prices for lamps and reconciling the difference referred to in enclosed. This is a matter I spoke to you about the other day. You will see that they refer not only to 16 candle lamps but also to other lamps in which there is a discrepancy between the prices charged and the prices quoted.

S. Insull,

Nov. 28th. 1883. per G.

Capital $10,000.
Shares $100. each

The Edison Lamp Company.

Number. Shares.

Incorporated under the Laws of the State of New Jersey.

This is to certify that is entitled to share in the capital stock of The Edison Lamp Company, transferable only on the books of the Company in person or by attorney on the surrender of this certificate upon consent of a majority of the ~~Directors~~ Stockholders after notice to them in the manner prescribed by the by-laws.

Issued to Purchaser

Dated Harrison, N. J. Nov. 1883.

President Treasurer.

Legal
(1884?)

Know all Men by these Presents
that I do hereby appoint
my attorney irrevocable
for me to sell and transfer to
the whole or any
part of the within named shares
with power to appoint one or
more attorneys for that purpose.
Dated this day of 188
In presence of:

Monthly Statement 1883-12-01

THE EDISON LAMP CO.,

East Newark, N. J., Dec 1st 1883

Thomas A Edison Esq.

F. R. Upton
Bills due by us 15297.74
" 41607.75
$56905 49

Bills due to us $20824.82

Lamps on hand Nov 1st 91555
" manufd in " 30429 costing $10716.33
121984

Home Ship.ts 18546
Foreign " 2800 21346 Bringing $10364.75
Lamps on hand Dec 1st 100638

Home orders for month 20097
Foreign " " " 6484 26581

Yours truly
Edison Lamp Co.

1883-12-05

THE EDISON LAMP CO.,

East Newark, N. J., Dec 5th 1883

Paul Dusell Esq.
#65 Fifth Ave.
New York

Dear Sir:-

In answer to enclosed letter from Société d'appareillage électrique. We would say that the difference in the price of lamps, sent them on your invoices of March 1st and 9th is a clerical error and one that can not be rectified unless through your influence. The Switzerland company certainly knew it to be a clerical error, and that they were not entitled to the reduction, as they had received correct invoices before and after the above date. And probably on several occasions positive and correct prices of lamps from you. We feel very badly that such a mistake should occur, and feel confident that it will

1883-12-05

THE EDISON LAMP CO.,

East Newark, N. J., ... 188

never be repeated.
We quote the following price on Lamps for any Foreign Country,

Ordinary Orders		Orders of 10000
B	.50	.35
a	.50	.40
10	.60	.50
32	.75	.60
50	1.00	
100	1.50	

On orders of 25000 Lamps we will deliver F.O.B. in Hamburg Antwerp Genoa and Liverpool

Yours truly
Edison Lamp Co.

1883-12-12

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRESIDENT,
FRANCIS R. UPTON, TREASURER.

EAST NEWARK, N. J., Dec. 12 1883

Dear Mr. Edison:

A letter from Stillwell says:

"The machines they make here are not worth a cuss. I don't think they will do much more until they get a shop of their own."

Yours Truly

Francis R. Upton.

THE EDISON LAMP COMPANY.

$787 15/100 No. 320 East Newark N.J. Dec 13 1883 1883-12-13

At Sight Pay to

the order of THE EDISON ELECTRIC LIGHT COMPANY

Seven Hundred & Eighty Seven 15/100 Dollars

WITH EXCHANGE ON NEW YORK.

Value received, and charge the same to account of

To Thomas A Edison Cons Dept New York

THE EDISON LAMP COMPANY.

Francis R. Upton Treas.

THE EDISON ELECTRIC LIGHT COMPANY

THE EDISON LAMP COMPANY.

$719 50/100 No. 321 East Newark N.J. Dec 13 1883 1883-12-13

At Sight Pay to

the order of THE EDISON ELECTRIC LIGHT COMPANY

Seven Hundred & Nineteen 50/100 Dollars

WITH EXCHANGE ON NEW YORK.

Value received, and charge the same to account of

To Thomas A Edison Cons Dept New York

THE EDISON LAMP COMPANY.

Francis R. Upton Treas.

THE EDISON ELECTRIC LIGHT COMPANY

1883-12-18

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRESIDENT,
FRANCIS R. UPTON, TREASURER.

EAST NEWARK, N. J., Dec. 18, 1883

Thos. A. Edison
Dear Sir:

We have always charged experiments to expense and then run expense each month into the lamp account. We charge one per cent per month for depreciation on Buildings Fixtures and Machinery and Tools and this carries into lamp acct. any little experiments that may be made in altering tools.

I hold that at present this is a mistake as when in the future we have a profit to divide we need

1883-12-18

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRESIDENT,
FRANCIS R. UPTON, TREASURER.

EAST NEWARK, N. J., _____ 188

to have as large asset accounts as possible, so as to be able to take account of stock and so run up the cost of the lamps by the depreciation in our tools buildings &c. I am holding back $5000 that is due Holzer so as to run it into the account of the next six months or later as part of the lamp expense. Holzer knows about this. I also have some other unsettled accounts that I am holding back so as to be able to run them into the cost of lamps when we have a profit to divide.

Yours Truly
Francis R. Upton.

Lamps

East Newark, N. J., Dec. 19th 1883

Cons. Dept. 65 - 5th Ave.

We ship To-day by Lackawanna Line

To W. D. Rick Middletown Pa.

1 Bbl. #3820 - Cont'g. 100 Leat lamp

2 Bbl. #3821-2 " 300 - 10. c.p. 105 Volt.

EDISON LAMP CO.

m.

THE EDISON LAMP COMPANY.

$428 00/100 No. 328 East Newark N.J. Dec 20th 1883 (1883-12-20)

Cash Night Pay to

the order of THE EDISON ELECTRIC LIGHT COMPANY

Four hundred & twenty eight 00/100 Dollars

WITH EXCHANGE ON NEW YORK.

Value received and charge the same to account of

To T. Edison Cons. Dept. Fifth Ave. New York

THE EDISON LAMP COMPANY.

Francis R. Upton Treas.

Lamps

East Newark, N. J., Dec. 24th 1883

Cons. Dept. 65 - 5th Ave.

We ship To-day by Fall River

Line. To W. H. Dwelly Fall River

1 Bbl. #3869 - Cont'g. 150 A lamp - 108. V.

1 " #3870 " 37 32 c.p. 108 V.

EDISON LAMP CO.

Lamps

East Newark, N. J., Dec. 24th 1883

Cons. Dept. - 65 - 5th Ave.

We ship To-day by C. To

C. C. Ill. Co Tiffin Ohio

2 Bbls. #3871-2 - Cont'g 240 - 10. c.p. lamps 105 V.

1 Bbl. #3873 " 120 16 " " 105. V.

1 Half #3874 " {6 32 " " 105. V.

{6 30 " " 105. V.

EDISON LAMP CO.

1883-12-27.

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRESIDENT,
FRANCIS R. UPTON, TREASURER.

EAST NEWARK, N. J., Dec. 27 1883

Dear Mr. Edison.

Regarding carbons for Paris. In conversation with you it was agreed to let the matter drop until we heard from Paris.

As a matter of fact, we have not been able to make the carbons required without extra expense as the regular demands of the factory have taken all we make.

I write your opinion that the carbons should be shipped and will do so as soon as we can spare them.

Yours Truly

Francis R. Upton.

1883-12-28

THE EDISON LAMP CO.,

EAST NEWARK, N. J., Dec 28th 1883

T. A. Edison Esq.
65 Fifth Ave.
New York

Dear Sir;

We will sustain prices as quoted by Mr Chas. Batchelor to the Germans, for Material for Paris Lamp factory.

Yours truly
Edison Lamp Co.

THE EDISON LAMP COMPANY.

$179 45/100 No. 337 East Newark N.J. Dec 31 1883 1883-12-31

At Sight Pay to

the order of THE EDISON ELECTRIC LIGHT COMPANY

One hundred & seventy nine — 45/100 Dollars

WITH EXCHANGE ON NEW YORK.

Value received and charge the same to account of

To T. A. Edison Cons. Dept

New York

THE EDISON LAMP COMPANY.

Francis R. Upton Treas.

1883

THOMAS A. EDISON,
No. 65 FIFTH AVENUE.

NEW YORK, ... 188

Proposition from the Lamp Co.

Annual Sales	Percentage of gross receipts Light Co.
$ 100,000 — 250,000	5 %
250,000 — 500,000	6
500,000 & over	7

M E M O R A N D U M O F A G R E E M E N T made this

day of 188 , between the Edison Electric Light Company of the City of New York party of the first part, hereinafter called the Light Company, the Edison Lamp Company, a Corporation organized under the laws of the State of New Jersey, party of the second part, and hereinafter called the Lamp Company, Thomas A. Edison, party of the third part, and Charles Batchelor, Edward Hibberd Johnson and Francis R. Upton, parties of the fourth part.

W H E R E A S a contract has heretofore existed between Mr. Edison and the Light Company, dated the Eighth day of March 1881, relating to the use by Mr. Edison of the Light Company's patents in the manufacture of electric lamps, some of the provisions whereof are claimed and represented by Mr. Edison and the parties of the fourth part--his associates in business thereunder--to inequitable and oppressive to them in practice, and especially certain provisions which fix the price of lamps and others which permit the Light Company under certain circumstances to modify or revoke the manufacturing license created thereby,

A N D W H E R E A S the said Edison and his associates have been put to heavy charges in the matter of experiments made with the view to improve the economy and efficiency of said lamps, which it is agreed by the Light Company ought not to be wholly borne by said Edison and his associates;

N O W T H E R E F O R E with the object of reforming the relations of said Edison and his associates as licensed manufacturers with the Light Company as the Licensor so as to constitute a permanent working relation which will be equitable and mutually beneficial,

I T I S A G R E E D A S F O L L O W S :-

F I R S T. The Light Company and Mr. Edison hereby rescind and cancel the Agreement of 8th. March 1881; such recission to take effect as of the 1st. day of September 1882, so far as relates to business done subsequently to the last named date.

S E C O N D. Mr. Edison and the parties of the fourth part having organized themselves under the laws of the State of New Jersey as a Corporation under the name and style of The Edison Lamp Company of New Jersey, all the accounts and business of Mr. Edison and his said associates with the Light Company in respect to the manufacture of lamps under the above mentioned agreement shall be transferred to and taken over by the Lamp Company and future settlements of existing accounts shall be made with said Company.

T H I R D. The Light Company does hereby license and agree to license the Lamp Company with the exclusive right to manufacture within the United States the incandescent electric lamp and all parts thereof invented by Mr. Edison which is now, or may at any time hereafter be covered by Letters Patent upon inventions

of said Edison, and be or become the property of the Light Company under such Letters Patent; and further agrees that it will not license under any of said Letters Patent the introduction into the United States to be used therein, of such lamps manufactured in foreign countries. Whenever the Light Company may own Letters Patent for inventions of any parties other than Mr. Edison and the parties of the fourth part, it will license the Lamp Company to use the same in their business of manufacturing electric lamps without further compensation. In case the Light Company may acquire the right by license to use inventions of the character last above described, it will grant the same right of use under its license to the Lamp Company, whenever the terms of its license permits, and it will, in taking licenses for such inventions, endeavor in good faith always to obtain such license in such form as to enable it to license the Lamp Company.

F O U R T H. The exclusive license above provided, unless terminated, or the exclusive character thereof modified as hereinafter provided, shall continue in respect to each of such Letters Patent during the life of the same.

F I F T H. The Lamp Company agrees to supply promptly all orders of the Light Company or of its licensees made through it. The price to be received by the Lamp Company is now fixed until changed in the manner hereinafter provided at forty cents for each standard lamp of sixteen candle power or under, and under 140 ohms resistance, with the cost of boxing and packing according to the

schedule of charges for the same items of expense charged by the Company to be added.

All lamps are to be securely boxed ready for shipment and delivered at the Railway station most convenient for forwarding to ultimate destination, without further charge.

The price now fixed and all prices hereafter fixed from time to time shall be reduced by agreement as improvements in the art of manufacture or other causes may make such reduction desirable, and all profits over and above the amount of five cents per lamp shall be equally divided between the parties hereto; but the Lamp Company shall have no share in what shall be charged or received by the Light Company from purchasers beyond the price or prices now or hereafter to be fixed as aforesaid. The Light Company shall have the right to require any royalty which it may deem proper to collect from its licensees being purchasers of lamps to be added in all bills to the price of the lamp, and such royalty shall be first deducted and retained by or paid over to the Light Company before any accounting between the parties in respect to the profits of manufacturing provided for under this article.

The prices of all lamps of a power exceeding sixteen candles or a higher resistance than 140 ohms or matched lamps having same resistance and volts or lamps of higher economy than 10 per electrical horse power 16 candles each shall be fixed from

time to time so as to secure to the Lamp Company exclusively the same ratio of profit and no more which it receives exclusively as above provided upon lamps of sixteen candle power or under. It is understood that improvements in the economy of lamps are likely to be attained by increase in the resistance of such lamps above the present normal standard of 140 ohms, and also that economy may be attained by placing two or more lamps in series called "match lamps", having the same resistance and volts, and that such economy may also be attained by making lamps of 16 candles in such manner that more than ten per electrical horse power can be obtained; also that such economy may be attained in other ways, all of which ways may involve increase of cost of manufacture; And it is therefore agreed that when in any of the cases above described, the Lamp Company shall claim that it is being put to a cost in manufacture relatively greater to the same efficiency or economy in the lamp than that necessarily incurred to make lamps of 16 candle power and 140 ohms resistance, it shall be the duty of the parties hereto to unite in a re-adjustment of prices for lamps manufactured under such new conditions, and in case of failure to agree, either party shall have the right to demand an arbitrationcomposed of three skilled persons, one of whom shall be appointed by the Lamp Company, the other by the Light Company, and the third of whom shall be selected by these two, and, after hearing the parties with such testimony as they may desire to present, and examining into the whole matter, the majority of the said ar-

bitrators shall have power to fix a new scale of prices for such new grades of lamp, and all prices thus fixed shall be subject to revision and alteration in the same manner and upon the same principles as is herein provided, for fixing prices for lamps now being manufactured.

The Lamp Company will continually endeavor to reduce the cost of the manufacture of all lamps, and all profits of manufacture shall be regularly accounted for to the Light Company, and one half thereof after paying to the Lamp Company five cents of profit per lamp upon lamps of sixteen candle power or under as aforesaid, and the same ratio of exclusive profit upon other lamps shall be paid over to the Light Company. Accountings shall be made on the first days of February in each year for the twelve months ending on the Thirty-first day of December preceding such accounting .

Accurate written statements of sales and collections during the preceding six months shall be made by the Lamp Company to the Light Company on the first days of August and February in each year together with an itemized or classified statement of actual cost of production; and the Light Company by its officers or agents appointed by its Board for the purpose shall have free access at all times to the manufactory and books of the Lamp Company, and all books connected with its business for the purpose of investigating and verifying the facts.

In determining the cost of lamps the total output of the Lamp Company during the period accounted for including all lamps sold to all countries shall be taken into account, and the average cost of all lamps of each grade or description manufactured during such period shall be taken as the actual cost of each lamp of each particular grade or description for the purposes of this contract.

S I X T H. It is mutually conceded by the parties:

(1) That the Lamp Company must have such assurance of being continued in this exclusive right of manufacturing as will justify it in making adequate preparations to meet the demands of the Light Company or its licensees for lamps at all times during the period of this contract.

(2) That the Light Company cannot safely place the manufacture of its lamps wholly out of its control so as to be unable to protect itself practically and efficiently against the possible consequences of failure or inability of the Lamp Company to supply all demands for lamps:

And it is therefore agreed in order to enable the Lamp Company to make suitable provision to meet all such demands so far as they can be foreseen, that the Light Company shall, whenever it grants a license for the use of its lamps in any territory within the United States, give notice thereof to the Lamp Company, with the name of the licensee, and will require from such licensee notice and advice from time to time, of the number of lamps re-

quired by it, not less than three months before the same shall be required, which notice and advice the Light Company will promptly transfer to the Lamp Company. The Light Company will also, upon the request of the Lamp Company where it may deem the same to be necessary obtain so far as is convenient and proper, suitable security, or such payment in advance, as will justify and enable the Lamp Company to establish additional buildings or machinery when necessary to supply any extraordinary demand for lamps.

After such notice and within three months of any order it shall be the duty of the Lamp Company, on receiving due payment therefor, to supply to the Light Company or any of its licensees the number of lamps called for by such order.

In all business connected with the supplying of lamps the Light Company will act as the agent both of the licensee and the Lamp Company without charge to the Lamp Company, receiving at its option any royalty which it may deem proper to collect upon the sale of lamps over and above the price fixed and payable to the Lamp Company as and for its exclusive benefit directly from the licensee or from the Lamp Company as it may elect.

This agreement does not constitute a license to the Lamp Company to sell lamps except as herein expressly provided; and the Lamp Company agrees as a continuing condition of its manufacturing license that no order shall be executed in any of the countries of North or South America except through the Light Company.

All settlements for lamps shall be made through the Light Company as agent for the Lamp Company, to collect all amounts due to it. All shipments and deliveries to countries of North or South America shall be made under the sole direction of the Light Company to such degree as it may choose at any time to exert the same, but without any charge therefor to the Lamp Company.

S E V E N T H. It being essential to the Light Company's interests that its licensees shall at all times be able to procure full supplies of lamps with promptness and despatch, of suitable styles, quality and character,

IT IS FURTHER AGREED:

1. That all lamps shall be of one or more standard kinds, sizes, styles and grades to be determined by the Light Company, and from time to time modified by it when necessary to introduce improvements affecting style, efficiency, economy, durability, or other qualities of such lamps. But any change which shall enhance the cost of such lamps beyond what is necessary at the date of this agreement shall be made the subject of a revision of prices, preserving the same relative proportion of outlay and profit as herein fixed; and in case of failure of the parties to agree upon a revised price the difference shall be submitted to competent arbitrators in the manner provided for in the article hereof.

2. That the diagrams and drawings hereto annexed, marked

"Exhibit A." shall be taken as establishing such standards until the same shall be modified by the Light Company.

3. That the Lamp Company shall deposit with the Light Company complete working models of such lamp in all its different forms as it has heretofore been made by Mr. Edison and his associates, and hereafter, during the continuance of this contract, full and complete duplicates of all working drawings or models of improvements or changes in lamps and drawings of all machinery, tools and appliances of every kind employed by it in the manufacture, handling or treatment of lamps or the parts thereof shall, with full specifications of the same, be deposited with the Light Company as soon as the same come into use.

4. In case the Lamp Company shall fail to supply all the lamps required by any licensee of the Light Company within the time above provided, the same having been called for in good faith and for actual use, the Light Company shall have the right to manufacture, or caused to be manufactured by others, such an amount of lamps as may in its judgement be required not only to supply quantities as to which the Lamp Company shall have been deficient, but also such further quantity as may in its opinion be required to guard against future failures of a similar character.

And having in view the necessity which the Light Company is under to make its territory rapidly valuable by providing ample sources from which its licensees may obtain supplies (which object is sought to be accomplished through this agreement) it is agreed

that the Light Company must and shall be left free to judge from time to time acting reasonably and with good faith, whether the resources of the Lamp Company are such that it is liable to fail in supplying the lamps which have been, or may be, required by the Light Company's licensees; and acting in good faith upon such judgement the Light Company shall have the right after any failure by the Lamp Company, to make or cause to be made, by others such amount of lamps as may in its judgement be required to supply past deficiencies and guard against the contingencies of future failure, and to sell and dispose of the lamps thus made at such time and in such manner as it may think proper; but it shall not have the right to manufacture, or authorize the manufacture by other persons except to such extent as may seem necessary for the purposes above set forth.

In contracting for lamps with any other manufacturer, or in providing means for such manufacture by itself, it shall be at liberty, however, to provide or contract for such future supply as will justify the outlay for plant necessary to cover the actual or possible deficiency by the Lamp Company which is sought to be guarded against.

5. The Lamp Company shall have the right, without royalty, to manufacture lamps for export to all foreign countries other than those of North and South America, but notice shall be given to the Light Company of the time, place and amount of each expor-

tation before shipment of the same from the manufactory, and the books of entry and correspondence of the Lamp Company or any person acting for it and relating thereto shall at all times be open to the inspection of the Light Company; but this right to manufacture for export shall not be allowed to interfere with the prompt execution of all orders by the Light Company or its licensees, and such orders shall always take precedence of all shipments to foreign countries.

6. Should the Lamp Company continue for a period of six months to fail in supplying the requirements of any of the Light Company's licensees, it shall then be at the option of the Light Company to terminate this exclusive license; but in that case it shall, if required by the Lamp Company, take over the manufactory and other property erected and provided by the Lamp Company for the purpose of such manufacture at the actual cost therof, with a fair allowance for depreciation by use, and in case the valuation cannot be agreed upon by the parties, the same shall be fixed by three competent appraisers, one to be chosen by the Light Company, one by the Lamp Company, and the other to be chosen by said two appraisers.

Should the Lamp Company elect not to make such a requirement it shall be the duty of the Light Company to deliver to it the orders of its licensees for such amount of lamps as the Lamp Company may have furnished as its average daily output for the three

months next preceding any notice by the Light Company of its intention to terminate the exclusive license upon the grounds above provided; and as to any excess over such average output which in its judgement is likely to be required thereafter by itself or its licensees, the Light Company shall be free to manufacture, or authorize the manufacture of, the same by other parties as provided in the foregoing clause.

7. In case the Lamp Company shall supply or sell lamps to any person or corporation in the United States, or in any other countries of North or South America, other than the licensees of ~~the Light Company~~, or shall sell to any of such licensees except upon an order in each instance made by the licensee through the Light Company, or by the Light Company itself, or shall fail to keep proper books of record and account for the purposes herein provided; or shall refuse access thereto to the Light Company's officers or properly authorized agent at any proper or reasonable time for the purposes of determining the cost of manufacture, or the amount of lamps made or sold, or the persons to whom sold, or shall fail to furnish models, working drawings and specifications as above provided, within a reasonable time after demand and which is fixed at three months or shall delay the supply to the Light Company's licensees by selling lamps to foreign countries without the consent in writing of the Light Company, it shall be at the option of the Light Company to revoke all rights, privileges or licenses granted or arising hereunder.

8. This agreement is intended especially to relate to the inventions of Thomas Alva Edison being the property of the Light Company but in case either of the parties hereto shall become the owner of any other letters patent or inventions, or any licenses therefor, relating to the lamps, or to tools, machinery and appliances useful in making the lamps, the Light Company and the Lamp Company shall each have secured to it in a proper manner the right to use and authorize the use of the same in the making of any lamp which it is empowered to make, or procure to be made hereunder. It shall also be an obligation of good faith binding on the Lamp Company and upon the said Edison, Batchelor, Johnson and Upton, and whoever may be associated with them and derive benefit herein to take all licenses or rights to use the inventions of others in such form that the Lamp Company may be able to convey, and the Light Company to demand and receive a complete right of use thereof to the Light Company, or such persons as it may authorize to manufacture. Prompt notification shall be given by each party hereto to the other of the acquisition of the ownership or the right to use any invention in or about the manufacture or handling of lamps or any of the parts thereof.

9. In determining the cost of lamps no compensation shall be allowed as paid to Mr. Edison, but compensation may be allowed at a fair and usual rate for actual services of Messrs. Batchelor, Johnson and Upton, not exceeding such as is customarily paid by

manufacturing establishments for similar services.

10. It is hereby represented by the Lamp Company and by the parties of the third and fourth parts respectively, that they have in good faith expended, since the beginning of their business, the sum of dollars in experimental work necessary to improvements in the lamps and the method of manufacture thereof; and it is agreed that all joint profits of manufacture, as fixed by the article hereof, (that is to say profits included in the price of the lamps now or hereafter to be fixed after deduction of five cents per lamp or in that ratio, which is to be the exclusive profit of the Lamp Company), shall be devoted to reimbursements of said sum of dollars to the Lamp Company.

All experiments which may be made by the Lamp Company under the direction of the Light Company shall be paid for by it, and all expenditures for experiments made by the Lamp Company without such order shall, as to the one half thereof be, from time to time, reimbursed to it out of net profits due to the Light Company on the manufacture of the lamps.

In determining under this article when the amount already expended by MR. Edison and his associates has been ~~paid~~ repaid, and in determining the amount due for experiments hereafter to be made, account shall be taken of all foreign sales, and the profit on each lamp thus sold over and above five cents per lamp shall be applied to the payment of such experimental expenses.

Monday at 11 –

Certificate of Organization

of

The Edison Lamp Company.

Certificate of Organization.

This is to certify that we, Thomas A. Edison, Edward H. Johnson, Francis R. Upton, Frank McLoughlin and William Holzer, do hereby associate ourselves into a company under and by virtue of the provisions of an Act of the Legislature of the State of New Jersey, entitled "An Act Concerning Corporations," approved April seventh, eighteen hundred and seventy-five, and the several supplements thereto and amendatory acts thereof, for the purposes hereinafter mentioned, and to that end we do by this our Certificate set forth:

First. That the name which we have assumed to designate such company, and to be used in its business, and dealings, is

The Edison Lamp Company.

Secondly. That the objects for which said company is formed are to manufacture and sell lamps or electrical apparatus to be used in electric lighting; to purchase or acquire patents, inventions or rights useful, neces-

sary or desirable in the manufacture of said lamps or electrical apparatus; to buy or lease real estate and to erect thereon buildings & machinery for the uses of said Company; to issue bonds secured by mortgage upon the property to be owned by said Company for the purpose of raising money to aid in prosecuting said manufacturing business, and to do each and every act incidental to said business, and to exercise all the powers granted to corporations in the act above mentioned and the supplements thereto and acts amendatory thereof. ——

That the business of said Company is to be conducted in the Township of Harrison, in the County of Hudson and State of New Jersey, where the manufacture of said lamps or electrical apparatus is to be carried on, and at such other places throughout the United States as may be designated by the stockholders of said Company; that the principal part of the business of said Company within this State is to be prosecuted in said Township of Harrison, and that the principal agency for the sale of said manufactured products is to be in the City, County and State of New York. ——

[2]

Thirdly. That the total amount of the capital stock of said Company is ~~Two Mill~~ One Million — dollars; the number of shares into which the same is divided is Four hundred and the par value of each share is ~~one~~ Twenty Five hundred dollars. The amount with which said Company will commence business is ~~Four Thous~~ Seven Hundred and Fifty thousand dollars ~~and dollars~~ which is divided into ~~one hundred~~ One hundred shares of the par value of ~~one~~ Twenty five hundred dollars each.

Fourth. That the stock of the said Company shall be transferable only on the books of the Company by the holder thereof in person or by an assignment made upon said books, subject to such restrictions and upon such terms as the By Laws of the Company may prescribe.

~~Fifth~~ Fourth. The names and residences of the stockholders and the number of shares held by each are as follows:

		Shares
Thomas A. Edison	of Menlo Park N.J.	~~40~~ 67
Charles Batchelor	of Menlo Park N.J.	10
Edward H. Johnson	of Newyork N.Y.	5
Francis R. Upton	of Orange, N.J.	15
~~Francis Robbins Upton of Orange N.J.~~		

~~Fifth~~

Fifth. That no stock-holder shall have the power or right to examine any of the books of the said Company without the consent of the person or persons owning a majority of the stocks, excepting however the book or books in which the transfer of stock shall be registered, and the books containing the names of the stock holders, which books shall be open to the examination of every stockholder for thirty days previous to any election of directors.

Seventh ~~Eighth~~ The period at which said Company shall commence business is the day of ~~November~~ December, Eighteen hundred and eighty-~~three~~, and the period at which it shall terminate is the first day of ~~November~~ December, Nineteen hundred and thirty-three.

In Witness whereof we have hereunto set our hands and seals this day of ~~December~~ October, 188~~3~~4.

Signed, Sealed & Delivered in the presence of:

put on only 4 seals

State of New Jersey
County of } ss:

Be it Remembered, That on this day of in the year of our Lord, one thousand Eight hundred and eighty-~~three~~ four before me personally appeared Thomas A. Edison

Edward N. Johnson, Francis R. Upton and William Holzer

who, I am satisfied, are the persons ~~whose~~ ~~named~~ named and who executed in the foregoing certificate, and ~~to whom~~ to whom I first made known the contents thereof, and thereupon they severally acknowledged that they signed, sealed and delivered the same as their voluntary act and deed, for the uses and purposes therein expressed.

[6]

1883. Electric Light - Edison Lamp Company - Lamp Test Reports (D-83-033)

This folder contains correspondence and reports relating to lamp tests conducted by William Holzer and John F. Ott.

Approximately 20 percent of the documents have been filmed. The following categories of documents have not been filmed: incomplete material; test notes and reports lacking accompanying correspondence or other identifying information.

1883-01-05

642

Upton

Please have Lawson put 1/2 doz Carbon forms with Bamboo in ready for Carbonizing in dish & Cover with Boiled Linseed Oil & then heat out very gradually up to say 500 deg Fahr - when most of the Carbonizing will take place Then you can Either wash the forms in turpentine after taking out of dish & then put in regular run & Run up to high heat as regular or you can wash with turpentine & take out loop & put in new forms - The theory is that the heat is applied perfectly Even & thus you prevent internal stress, & also prevent oxidation at the part where the Carbon is the most sensitive I have Know how you Come out with it

T Alva

January 5 1883 —

Filed Jan 12/83

1883-02-14.

I want the exact degree of contraction in length of the filament at the different temperatures by which it is allowed to be lighting

THE EDISON LAMP CO.

EAST NEWARK, N. J. Feby 14 1883

T. A. Edison Esq
New York

Dear Sir.

The experiment to ascertain the degree of heat that the fibre must be charged in carbonizing is as follows.

At 250 deg. the fibre is a slight change becomes darker up to from 350 deg. is reached at 375 deg. the fibre changes to a black and at 400 deg. there appeared in Bulb a cloud of smoke which lasted about three (3) minutes & then disappeared. I removed the sample both from fibre & then examined fibre & found it very high polish & feel black.

Yours &c
H. Holz

[FROM CHARLES S. BRADLEY]

11 April 6th (1883)

Bradley Mr. Upton

I have made the remarks
Alteration & improvement on
the new filler Planing Mach
& it works to my
Entire Satisfaction I
cut 500 (I could have
cut more) not making any
Bar on (Saturday Afternoon
I have taken Cutter
up Parts made 4500 Pin
Mount & turn out 5 2 4
fills per Hour Don't think
Cutter will need Sharpening
More than twice a day
this Mach & it work is
will make Double as much
filler as the Smarter Hand
Have an Pet Mach
for Superior

B

Mr. Gibson: Sometime Tuesday or Wednesday

I think it Almost Complete

Making Bell Nut 12 c
" Nut — 8
" Threaded tube — 12
32 c

Cutting of Brass tube
for Lead Pipe — 3 c
ream Lead Pipe
Cork — 2
Removing Lead Pipe — 4

Cutting off Metal for
Lead Bell Putting on — 13

Bell Nut — Reman
Nut & Threaded Tube 33
55
174
175

1883-05-21

THE EDISON LAMP CO.,

EAST NEWARK, N. J., May 21st 1883

T. A. Edison Esq.
" New York
Dear Sir.
We started at 7 a.m. this morning. Four (4) Furnace
One (1) 15 hours for 100 Hrs
" (1) " " " 75 "
Two (2) " " " 50 "
No Blast - to be used.
The No Blast - burner seems to show a very great trend in every respect.
We exhausted 6,500 Lamps Pattern + in hopes of doing better this present week.
Will forward curves on the above experiment as soon as possible
Yours &c
F. B. Hulsen

1883-05-30

THE EDISON LAMP CO.,

Maxim test

East Newark, N. J., ... 188

Test of 6 Maxim Lamps

The carbons of these lamps after burning, measured 4/3" × $\frac{4/2 \times 22}{1000}$.
The candle-power of each lamp was taken at different angles as shown by the following diagrams, and the average of the candle-powers at the different positions was taken to be the true candle-power of the lamp.

No. 1

92 114 96

34 — 2·0 — 30

94 112 96

Avg. 76

2

102 126 100

22 — 1·7 — 22

106 126 99

Avg. 80.

3

99 115 101

25 — 1·3 — 25

105 119 101

Avg. 78

4

108 129 106

27 — 1·1 — 25

106 127 107

Avg 83.

5

103 123 98

37 — 1·2 — 31

108 129 111

Avg. 84.

6

100 116 96

33 — 1·2 — 34

92 116 100

Avg. 78

1883-06-30

THE EDISON LAMP CO.,

Maxim test

East Newark, N. J., ... 188

The lamps were then set up for a life test at such volts as gave an incandescence as near 340 candles to the horse-power as possible and the candle-power was taken every hour.

The following shows the volts and candle power at which each lamp was set up.

	C.P.	Volts	Res.	R. lbs.	Lamps per. HP	C.P. per. HP.
No. 1	76	77½	36.3	7317	4.51	343
2	80	77½	34.2	7769	4.25	340
3	78	78	34.7	7760	4.25	331
4	83	79½	35.	7963	4.14	344
5	84	80.5	35.9	7985	4.13	347
6	78	78	34.7	7760	4.25	331
Avg.	80.	78½	35.1	7759	4.25	339

The following shows the candle-powers at the end of each hour.

1883-06-30

THE EDISON LAMP CO.,

Maxim test

East Newark, N. J., ... 188

hrs.	1	2	3	4	5	6
0	76	80	78	83	84	78
1	66	66	72	74	71	68
2	58	60	64	65	64	57
3	47	52	55	55	57	43
4	41	46		49	52	38
5	37	37		36	49	32
6		33			42	28
7					41	27
8					39	25
9					36	24
10					33	22

hrs.	5	6
11	32	20
12	31	18
13	29	
14	26	
15	25	
16	24	
17	23	
18	23	
19	22	
20	22	
21	19	

Life

1 – 390 minutes 4 – 300 minutes
2 – 410 " 5 – 1305 "
3 – 160 " 6 – 900 "

Average 578 minutes.

The volts of another lamp were then taken at the different candle-powers & the economy computed with the following results.

1883-06-03

THE EDISON LAMP CO.,

Maxim test

East Newark, N. J., ... 188

C.P.	Volts	Res	Ft. lbs.	Lamps per HP	C.P. per HP
.4	36½	43.7	1349	24.5	9.8
.8	39½	42.9	1609	20.5	16.4
1.6	43	41.8	1957	16.9	27.
2.4	45½	41.4	2214	14.9	35.7
3.2	47	40.6	2396	13.8	44.1
4	48½	40.6	2563	12.8	51.2
4.8	50	40.5	2731	12.1	58
5.6	51	40.2	2864	11.6	64
6.4	52	39.8	3006	11.	70
7.2	53	39.8	3116	10.6	76
8	54	39.9	3230	10.2	82
9	55	39.9	3351	9.9	87
10	56	39.9	3476	9.5	95
11	57	39.8	3608	9.1	101
12½	58	39.7	3758	8.8	110
14	59	39.5	3894	8.5	119

C.P.	Volts	Res.	Ft. lbs.	Lamps per HP	C.P. per HP
16	60	39.3	4048	8.2	130
17½	61	39.1	4220	7.8	137
20	62½	39.2	4299	7.7	153
22½	63½	38.9	4587	7.2	162
25½	64½	38.5	4783	6.9	176
28	65½	38.	4997	6.6	185
32	66½	37.4	5226	6.3	202
36	68	37.3	5481	6.	217
41	69½	37.1	5756	5.7	235
46	71	36.9	6052	5.5	251
51	72½	36.6	6374	5.2	264
61	74	36	6687	4.9	301
70	76	35.9	7108	4.6	323
80	78	35.8	7629	4.4	350
90	80	35.4	7991	4.1	372
106	82	35.	8506	3.9	411

J. T. Marshall

11

May — 83

Test Marcin
Camps

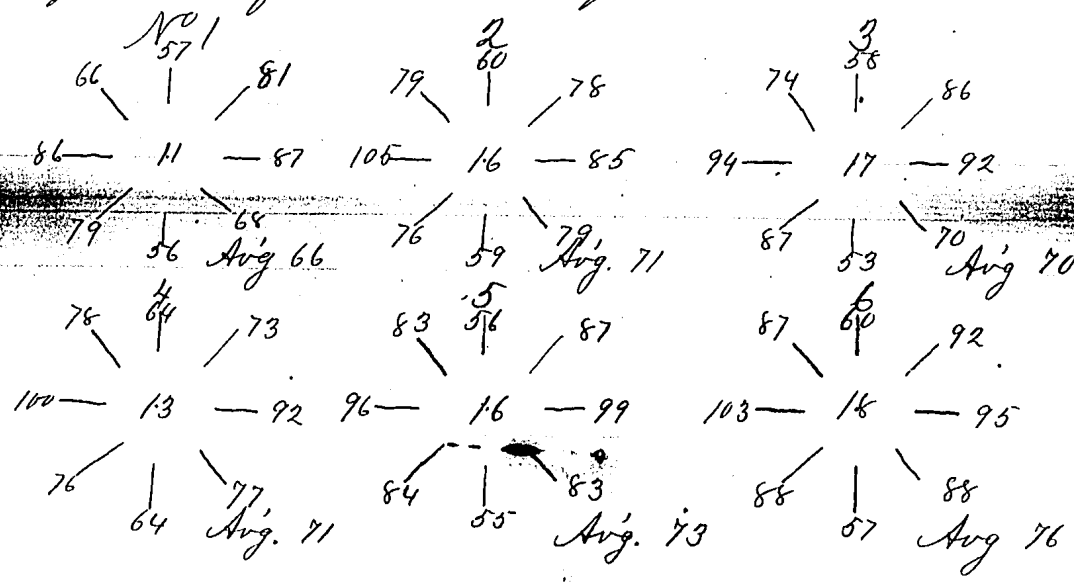
1883-06-30

THE EDISON LAMP CO.,
Edison test
East Newark, N. J., ... 188

Test of 6 Edison Lamps

These lamps were regular 6½" $\frac{8 \times 17}{1000}$ lamps & the carbons after burning measured 5¼" $\frac{5 \times 10}{1000}$.

The candle-power of each lamp was taken at different angles as shown by the following diagrams, and the average of the candle-powers at the different positions was taken to be the true candle-power of the lamp.



1883-06-30

THE EDISON LAMP CO.,

Edison test

East Newark, N. J., 188

The lamps were then set up for a life test at such volts as gave an incandescence as near 340 candles to the horse-power as possible and the candle-power was taken every hour.

The following shows the volts and candle-power at which each lamp was set up.

	C.P.	Volts	Res	Ft. lbs.	Lamps per HP.	C.P. per HP.
No 1	66	123	104.7	6393	5.17	341
2	71	129.5	107.4	6905	4.77	339
3	70	126.5	102.3	6919	4.77	334
4	71	123	96.6	6998	4.72	335
5	73	131.5	106.6	7175	4.60	335
6	76	129.5	101.1	7335	4.50	342
Avg.	71	127	102.9	6954	4.75	337

The following shows the candle-powers at the end of each hour

1883-06-30

THE EDISON LAMP CO.,

Edison test

East Newark, N. J., 188.

hrs.	1	2	3	4	5	6	hrs	4	5
0	66	71	70	71	73	76	7	30	29
1	57	61	51	58	54	61	8	30	28
2	48	51	46	50	47	53	9	28	
3	39	45	39	45	41	47	10	28	
4	36	40	33	41	36	40	11	27	
5	32		30	37	34	38	12	26	
6				32	30				

Life

1	330 minutes	4	735 minutes
2	230 "	5	495 "
3	345 "	6	330 "

Average 411 minutes

The volts of another lamp were then taken at the different candle-powers & the economy computed with the following results.

1883-06-30

THE EDISON LAMP CO.,

Edison Test

East Newark, N. J., ... 188

C.P.	Volts	Res.	Ft. lbs	Lamps per HP	C.P. per HP	C.P.	Volts	Res.	Ft. lbs	Lamps per HP	C.P. per HP
1/2	60	114	1397	23.6	11.8	23	98½	95.6	4489	7.4	169
1	65½	112.4	1693	19.5	19.5	26	100½	93.4	4784	6.9	179
2	70	106.8	2030	16.2	32.4	31	103½	93.5	5069	6.5	202
3	73½	105.7	2261	14.6	43.8	35	105½	92.5	5325	6.2	217
4	76½	103.9	2512	13.1	52.4	40	108	92.6	5574	5.9	237
5	79½	102.6	2724	12.1	60.5	46	110	90.8	5898	5.6	258
6	82½	102.5	2868	11.5	69	52	112.5	90	6220	5.3	276
7	83	101.6	3000	11	77	58	114.5	90.3	6422	5.1	298
8	84½	100.6	3143	10.5	84	64	116	88.7	6675	4.9	316
9	86	99.4	3292	10	90	70	118	88.5	6960	4.7	332
10	88½	100.7	3440	9.6	96	78	120	88	7238	4.6	356
12	90	98.4	3619	9.1	109	86	122	87.1	7559	4.4	375
14	92	98.3	3888	8.5	119	96	124	85.9	7923	4.2	400
16	94	97.4	4014	8.2	135	108	126	84	8361	3.9	426
18	96	96	4247	7.8	152						

J. T. Marshall.

THE EDISON LAMP CO.

1883-06-05

31

THE EDISON LAMP CO.,

EAST NEWARK, N.J. June 5th 1883

RECEIVED
JUN 6 1883
ANSWERED

Mr. T. A. Edison

.....188...

FILE No.....

Dear Sir

Enclosed find Curves among them you will find 955. Twenty-Five hour Carbonization which shows well for life. Will send you the curving as soon as the last Lamp breaks.

The 100 hour run shows very favorable. Have a set-up for Life test. The slow carbonization has a critical point at which the fibre seems to twist & break. Am looking the matter up very carefully and will write you again shortly.

Yours

W. H. Wohlei

Lamps.

1883-01-09

THOMAS A. EDISON,
NO. 65 FIFTH AVENUE.

NEW YORK June 9 1883

Mr Edison
Dear Sir

I found in plugging in lamps the regulator slightly stuck, and in cutting them out it was still more noticed, when I got to 15 lights it stuck I pulled plug then put back took reading the second time and the reading was far below what it aught to be,

I also finished the 3 lamps in Seris they work well

J. F. Ott

1883-06-21.

CABLE ADDRESS—EDISON, NEW YORK.

THOMAS A. EDISON,
NO. 65 FIFTH AVENUE.

Per S. S. .....

Via .....

NEW YORK, June 21 1883

Mr Edison
Dear Sir

I made 8 moulds put 3 carbons in each mould making 24 carbons sent to lamp factory for carbonizing, and they sent back they carbonized all right but broke in taking them out,

Also finished three lamps in series work all right where will I send them to,

Also made Ampere meter and that works well,

Also received lamps from lamp factory to test meter and shall have a test to morrow morning

Also assisted Barnett on plate weing a scale for plate weing

Yours truly
J. Ott.

1

1883-06-30

THE EDISON LAMP CO.,

East Newark, N. J., June 30 1883

Report on Arston 100 light incandescent machine.

Machine is of old style using a separate exciter

Resistance of armature - cold -	.023	Ohms
Resistance of magnets	1.75	"
Internal resistance of machine including armature - brushes - brush holders - and leaders to binding posts on machine - measured hot - after running the machine some time with load -	.045	Ohms
Resistance of exciter; including armature, magnets and connections - measured hot -	1.36	Ohms

The proper load was determined from measurements made on a number of Maxim lamps which came with dynamo

The normal E. M. F is	65	Volts
The normal current is	166	Amperes

1883-06-30

THE EDISON LAMP CO.,

East Newark, N. J., ... 188

First test —

Speed 1150 revs per min

The magnets were excited and machine run 75 mins. with brushes removed when a thermometer held close to the running armature indicated 140° Fahr

Thermometer placed on tops of magnets under wooden cover indicated 132° Fahr

Temperature of room 82° "

The machine was then run 30 mins. giving 64 Volts and 161 Amperes with the brushes at point of maximum electro-motive-force — at the end of this time the thermometer close to armature indicated 146° Fahr

Thermometer on tops of magnets — 134° "

E. M. F. on line	64 Volts
Current	161 Amperes
E. M. F. on magnets	24. Volts.
Current on magnets	12.3 Amperes

1883-06-30.

THE EDISON LAMP CO.,

East Newark, N. J., ... 188

First test — concluded

Energy in internal circuit measured between binding posts —	51712 ft lbs. m
Energy in external circuit	466810 ft lbs. m.
Energy in magnets —	13095 ft lbs m
Energy in exciter —	9121 .. ..
Total electrical energy developed by dynamo, and exciter	530738 ....

In armature	.097
In magnets	.024
In exciter	.017
In external circuit	.860

Rejecting energy in exciter we have

Total energy	521.617

In internal circuit (armature)	.099
In magnets	.025
In external circuit	.875

1883-06-30

THE EDISON LAMP CO.,

East Newark, N. J., ... 188

Second test —

Brushes advanced to reduce sparking —

E. M. F. on line	62 - Volts
Current	164 - Amperes
E. M. F. over magnets	34 - Volts
Current on magnets	17.43 - Amperes
Speed	1120 revs. per min.

Energy in internal circuit —

measured between binding posts —	53657 ft. lb.
Energy in magnets	26238
Energy " exciter	.18880
Energy in external circuit	450781

Lw internal circuit	.097
Lw magnets	.047
Lw exciter	.033
Lw external circuit	.821

6.-30.-'83. J. W. Howell

1883-07-05.

EDISON LAMP COMPANY.

THOMAS A. EDISON, PRES'T.
FRANCIS R. UPTON, TREAS'R.

EAST NEWARK, July 5th 1883

Thos. A. Edison, Esq
New York

Dear Sir:-

Yours of the 2nd inst came to hand. In reply would say that Order No 11 is correct according to the curve sent - you put up at 64 C.P. size 6" 6½ x 9¼ Order 973 should have been marked 8 x 13½.

Order 988 is an experiment used a small quantity of Manganese in frim.

Will see you further in the matter & explain

Yours

Wm Holzer

1883.08.02

THE EDISON LAMP CO.,

EAST NEWARK, N. J., Aug. 2nd 1883

Mr. T. A. Edison

Dear Sir

Enclosed you will find Three (3) Curves of the Maxim Lamps & One (1) Curve of the Swan Lamp with permal of our own Curves.

Order 992 Carbonized as follows A Preliminary heating of Five (5) Hours in a Sand Bath up to 650° Fahr. & then placed in Furnace and run regular Nine (9) Hours.

Will mail you a few of the Curves of the 6" 6½ x 9¼ on Saturday

Yours Respectfully
Edison Lamp Co
per Wm Holzer

1883-08-06.

THE EDISON LAMP CO.

RECEIVED
AUG 7 1883
ANSWERED

EAST NEWARK, N. J., Aug 6th 1883

FILE NO.

Mr. T. A. Edison
New York

Dear Sir

Enclosed find Curves, Also corrections in the analysis of Order 992. on the Curve sheet with one (1) Lamp to complete record. We have examined Mr Latchfield's order and find it calls for Fibres.

Yours Respectfully
Edison Lamp Comp.
Per Wm Holzer
Supt.

1883 08-20

THE EDISON LAMP CO.,

EAST NEWARK, N. J., Aug 20th 1883

Mr. T. A. Edison
New York

Dear Sir. — Enclosed find burned Order 35 is the Resin experiment — Carbons taken from top of Pile. the burn of which shows good Life & Economy.
Order 42 Carbons from the same Crucible as order 35; from Centre of Pile which shows less economy & Life.
Resin placed in the base of Crucible.
We are making fair progress with the 400 ohm Lamp. Managed to obtain a few last week Carbonized them in a Nickel form & found Resistance to high otherwise good shape of Spiral. We have a lot in the oven in Carbon Forms & will report to you by Wednesday next. Yours E. L. Co
Wm Holzer

1883-08-21

THE EDISON LAMP CO.,

East Newark N. J., Aug 21 1883

T. A. Edison Esq
65 Fifth Ave
New York
City

AUG 23

Dear Sir

I have made the following experiments with the new clamps. And the following results

1 Lamp 8+13½ with shank on but no plating on carbon exhausted in twenty five minutes. then put it on the photometer at 96 candles: lasted 240 minutes then carbon broke about half way up leaving clamps all right. bulb slightly blackened. I also made one lamp 8+17 with no shank on: carbon nickel plated this one come off pump in the same time. showing no blue at clamps. I had this one put on photometer at 80 candles this lasted 285 minutes then broke the same as the other. but the globe was badly copper blackened. I have also made a lot more in different ways. with very good results.

2

1883-08-21

THE EDISON LAMP CO.,

East Newark, N. J., Aug 21 1883

4. = 8+13½ With platinum clamps and copper sleeves. shankles on, carbons copper plate

6. = 8+13½ With copper complete shankles on. carbon copper plated

6 = 8+17 With platinum complete shankles off nickel plated.

7. = 8+17. With platinum sleeves and copper clamps shankles off. nickel plated

1 = 8+13½ With platinum clamp. copper sleeve on one side the other platinum complete no shank on; carbon copper plated

4 = 8+13½ With copper clamps complete no shank on; carbons copper ~~copper~~ plated and dipped in copper amalgam)

14. = 8+13½. With copper clamps complete no shank on. Carbons copper plated. but sleeves heated red hot before putting in carbon

3

1883-08-21

THE EDISON LAMP CO.,

East Newark, N. J., Aug 21 1883

This seemes to be the best that we have struck as yet. they were worked high showing no blue at lamps. Mr Holzer and myself watched them worked off pumps. and he thinks very favorable of them, the same lamps will be put up Tomorrow on test and as soon as possible we will mail you the results.

I have since clamped twenty five more made in the same way which will go through Tomorrow

Yours Respt.
Martin M. Fowler

1883-08-23

Aug 23 1883

RECEIVED
AUG 24 1883
ANSWERED
FILE NO. 114

Mr Edison

Dear Sir

On my way up town I called at Murrys Saloon he says he has 14 lights burning and not one broken,

Mr Ifflin has 7 lights he says none broken but has trouble with one lamp as it is fastened to the dumb waiter and it gets loose in the socket and goes out,

Mr Feany has 16 lamps and 11 at central station,

I also noticed another

1883-08-23

feature in their arc light System when a subscriber cuts out an arc light they put in one in the station to prevent the pressure becoming to strong

I think I can keep an acount of the brokage of lamps as I am verry well aquainted with the clearks,

Yours truly

[illegible]

THE EDISON LAMP CO.,

EAST NEWARK, N. J., Aug 24 1883

T. A. Edison Esq.
N.Y.

Dear Sir
Enclosed find Cards
Orders 30 & 33 will show a
good record.
We have Carbonized a lot of
Fibres with 33 fibres in a form.
Come out very fair with about
5 per cent breakage. To morrow
we will run about seven thousand
through in one heat in one
Crucible. will send you full
report as to life & general economy

Yours &c
Wm B Holzer

1883-08-29

THE EDISON LAMP CO.,

EAST NEWARK, N. J., Aug 29 1883

Mr. T. A. Edison
Dear Sir
Enclosed find
Three (3) Carbon Sheets, New Style
Clamps used in Lamps & two (2)
Carbon Sheets regular Clamping.
Will mail you a Carbon Sheet
of the 8" 6x6 in to-morrow's
mail. We obtained very good
economy on the 8" 6x6 but life
very poor. Will put up for test
quite a few to-morrow & hope
to obtain better results

Yours Respectfully
Wm Holzer

1883-08-30

Write & say stick to this size & work the life up

THE EDISON LAMP CO.,

EAST NEWARK, N. J., Aug 30th 1883

Edison

Mr. T. A. Edison
New York

Dear Sir:
Enclosed find two curves of the 8" $\frac{6 \times 6}{1000}$ Fibres.
The Life very short, economy very fair & Resistance to high.
We have a lot in process of carbonization & hope to obtain better results.
Should we fail to obtain the desired Life, Economy & Resistance. then a new cut of fibre will no doubt bring the proper result say 8" $\frac{6\frac{1}{2} \times 8}{1000}$
this cut of fibre will give the desired Resistance & no doubt give long life & fair Economy.

Yours &c
Wm Holzer

1883-08-31

THE EDISON LAMP CO.,

EAST NEWARK, N. J., Aug 31st 1883

Mr. T. A. Edison
New York

Dear Sir
Enclosed find curves which show very fine Life.
The curve of order #30 is very good Life & no doubt the very finest obtained & will endeavor to excel it.
To-morrow will put up a set of the 8" $\frac{6 \times 6}{1000}$ & render you a report at once

Yours &c
Wm Holzer

THE EDISON LAMP CO.,

EAST NEWARK, N. J., Oct 30. 1883

Mr. T. A. Edison
New York

Dear Sir
Your experiment of Lamps with 8" long Inside Parts will be through Test-Room by Thursday. We have finished the Experiments on hand & will be through Test Room later part of this week & will report results to you.
The Enclosed Curve will no doubt be satisfactory

Yours &c
W. Holzer

1883-11-06

THE EDISON LAMP CO.,

East Newark, N. J., Nov. 6 1883

Mr. William Holzer,

I have to-day carefully examined the E.M.F. of the lines in the test room by comparison with the standard batteries which are fresh and found it to be 100 volts. This test is made almost every day and the position of the spot on the scale of the regulating dynamometer has not had to be changed for several months.

I have also tested the candle-power of the standard lamp by comparison with the standard candles and found it to be 16 candles.

The standard lamp is used but a short time each day and the regulating resistance in series with it is the same as it was more than two months ago.

J. F. Marshall.

1883-11-13

THE EDISON LAMP CO.,

EAST NEWARK, N. J., Nov 13th 1883

Thos. A. Edison Esq.
New York

Dear Sir

We send you the Experimental Lamps with Platinum wire 1/8 inch through Inside Part.
Four (4) of which have the wire exposed & four (4) not-exposed.
Also a Lamp with a Spun Glass Brush between Carbon showing that the brush has attracted considerable of the blackening.
Will have about Four (4) of your experimental order through to-morrow

Yours
W. Holzer

Lamps

1883-12-04

THOMAS A. EDISON,
No. 65 FIFTH AVENUE.

NEW YORK, Dec 4 1883

Answered

Mr Edison
Dear Sir

I made three curves on pressure lamp and found they change cosiderable No 1 gave a deflection 5 deg at 90 Volts
No 2 gives 6 at 95½ Volts
No 3 " 5 " 96½ Volts

Why would it not be a good idea to have some one at lamp factory make a dozen of these lamps take the curve of deflection, they give
Then set them up and take econiny and life test and compare the two curves, it might on ravel some new claws in lamp

Yours Truly

1883-12-06.

THE EDISON LAMP CO.,

EAST NEWARK, N. J., Dec. 6th 1883

T. A. Edison Esq
New York

Dear Sir
Enclosed find several Curves of your Experiments. The Balance of your experiments will be put up on Test-to-morrow the 7th inst. will mail you the Curves sheets as soon as record is obtained

Yours Respectfully
Wm Holzer

1883-12-12.

THE EDISON LAMP CO.,

EAST NEWARK, N. J., Dec. 12 1883

Mr. T. A. Edison
New York

Dear Sir
Enclosed find a few special Curves.
The Bast-Fibre is under way will have a test on the same by Tuesday next.
The W— New Stock will be taken out of furnace to-morrow the 13th finished the Carbonizing this a.m. but the Crucibles were to hot to handle otherwise would have reported as promised

Yours Respectfully
Wm Holzer

1883-12-18

THE EDISON LAMP CO.,

EAST NEWARK, N. J., Dec. 18th 1883

Mr. T. A. Edison
New York

Dec 24 1883

Dear Sir,
I have the following material in process of carbonizing. Tortoise Shell. Horn. Cocoa Fibre Vermicelli. Goose Quills. Bast Fibre and a lot of your New Stock Tissue Papers.
Enclosed you will find some Sheet of H— on stock.
Will report to you the result of the above material as soon as it comes out of Furnace.
The 8" 6x6 Bam Fibre Village Plant High Resistance will come through this present Week

Yours Respectfully
Wm Holzer

Lamps

1883-12-19

THE EDISON LAMP CO.,

EAST NEWARK, N. J., Dec 19 1883

Dec 24 1883

Mr T. A. Edison
New York

Dear Sir
Enclosed find a specimen of Carbonized Vermicelli. The difference in Resistance between Lamboo + Vermicelli is 2 3/10 in favor of Vermicelli. (Highest)
On subjecting it to a Microscopic Test, I find it looks quite fine, resembles bamboo in every respect. Vermicelli can be obtained in very large quantities. I have secured Parties that was purchased for the Horses for making Lamps + will put them in Shapes for a regular Carbon + Carbonize + see if enough for a test

Lamps + will put them Carbon + Carbonize + see if enough. Wm Holzer

THE EDISON LAMP CO.,

EAST NEWARK, N. J., Dec 28 1883

Mr. T. A. Edison
New York

Dear Sir,

Experiments on Vermeculli Stock; to ascertain the proper Method of forming it into the shape of a Carbon. The result of which has been as follows In subjecting the stock to a slight degree of heat, over a bunsen burner, for 15 seconds; the stock will be in condition to shape perfectly without any apparent injury. Any of the stock that is not perfectly straight can be straightened in the same manner by drawing it acrss the flame and turning it the same as you would a piece of glass.

Preparations have been made to carbonize about 100 will report the results as soon as they come through The silk experiment you spoke of a few days ago will receive prompt attention

Yours Respectfully

Wm Holzer

Lamps

Lamps broken in Dec 1883

Date	No of Lamps broken	Life of The lamps or when extinguished.
* 1 Fh	3	(2/9/83.) (30/11/83) (16/10/83)
2	2	(0) (0)
3	3	(0) (0) (0)
4	2	(24/10/83) (6/10/83)
5	1	(16/3/83)
6	4	(0) (14/11/83) (16/11/83) (0)
7	3	(11/10/83) (0) (0)
8	6	(30/8/83) (14/11/83) (4/12/83) (15/2/83) (26/11/83) (0)
9	1	(0)
10	24	(31/8/83) (21/4/83) (5/5/83) (9/2/8) (9/2/83) (5/5/83) (9/2/83) (28/10/83) + (16,0)
		we took down the cross lights, as usual two or three times a year
11	1	(10/12/8)
12	1	(23/11/83)
13	2	(24/11/83) (3/12/83)
14	1	(30/8/83)
15	3	(9/12/83) (13/12/83) (0)
16	4	(4/5/83) (17/11/83) (29/10/83) (0)
17	2	(24/11/83) (22/11/83)
18	5	(31/3/83) + (4,0)
19	1	(6/12/83)
20	1	(11/4/83)
21	5	(18/4/83) (6/12/83) (30/8/83) (2,0)
22	9	(31/10/83) (6/12/83) (22/12/83) (22/12/83) (22/12/83) + (4,0)
23	1	(0)
25	1	(23/12/83)
26	0	
27	1	(.0)

Date	Number of Lamps broken	
28	1	(1/12/83)
29	2	(11/9/83) (9/12/83)
30	1	(0)
31	2	(0) (0)

Remarks &c.

* The lamp was broken or went out on the first of Dec, it was put in on the 2 day of the 9th month in 83 and so on.

Lamps ~~+~~ marked 0 are the american ones, others with date are french ones.

Average burning hours per day 4 hours

(you will kind this confidential
F. D.

Description of Order 17191 (1883)

Lamps that have been dried and put on heater, Switch to 30 Volt-line, cut-out one hole at a time until the Carbon shows a Cherry red and then let burn for one hour and then move one hole at a time until both holes are cut-out but start from top of Spool box cutting out one hole when tube does not break switch to 150 Volt-line and work for blue when no blue is on Clamps and solid tube heat stems and if blue comes on clamp work again, then heat stems again and if no blue shows on Clamps Seal off.

[CONTINUED ON THE NEXT FRAME]

Order No.	Candles per H.P.	Life in minutes		Order No.	Candles per H.P.	Life in minutes
1	148	533	C. Tantalum	37	Carbon - Licorice 40-40 151	949
2	155	617	Round Kellers	38	Carbon. Licorice. 40/48 152	1433
3	162	178	Keller	39	Carbon Licorice 40/56 152	669
4	153	317	Keller	40	Carbon Licorice 40/64 154	831
5	151	323	C. Tantalum	41	Carbon Licorice 40/72 155	1639
6	130	1190	[illegible]	42	Carbon, Licorice 40-80 156	1104
7	139	684	[illegible] Licorice	43	Root flower 161	31
8	147	933	[illegible]	44	Bamboo - Sugar 40-8 134	638
9	154	2176	[illegible]	45	Prelim Sugar 40-8 149	1317
10	154	115	Keller	46	Bamboo Sugar 40.16 143	1460
11	159	Radiation 921	Sugar 40 Keller	47	Prelim Sugar 40-16 150	1950
12	168	278	Keller	48	Bamboo Sugar 40-24 140	677
13	147	773	Keller	49	Prelim Sugar 40-24 144	2459
14	166	Radiation 1184	Sugar 40 16	50	Bamboo Sugar 40/32 138	617
15	164	Radiation 1089	Sugar 40 24	51	Prelim Sugar 40/32 152	1499
16	164	Radiation 1362	Sugar 40 32	52	Marshalls 156	698
17	165	Radiation 818	Sugar 40 40	53	Bamboo Sugar 40.40 143	530
18	163	Radiation 1375	Sugar 40 48	54	Prelim Sugar 40 40 158	1708
19	162	1078	Sugar 40 56	55	Bamboo Sugar 40/48 150	1478
20	154	1038	Sugar 40 64	56	Prelim Sugar 40/48 155	1478
21	159	1407	Sugar 40 72	57	Bamboo Sugar 40/56 147	521
22	153	831	Sugar 40 80	58	Prelim Sugar 40-56 158	2482
23	163	764	Carbon Medium 40	59	Bamboo Sugar 40-64 148	850
24	151	1199	Carbon Medium 40 16	60	Prelim Sugar 40/64 150	1259
25	154	1526	Carbon Medium 40 24	61	Bamboo Sugar 40-72 137	783
26	153	1360	Carbon Medium 40 32	62	Prelim Sug 40 72 147	1588
27	149	971	Carbon Medium 40 40	63	Bamboo Sugar 40-80 138	412
28	150	737	Carbon Medium 40 48	64	Prelim Sugar 40-80 149	1501
			Carbon Medium 40			

[CONTINUED FROM THE PRECEDING FRAME]

17	165	818		53		530	
18	163	1375	Rubidium Cesium Sugar 40/48	54	Probe Sugar 40/40	158	1708
19	162	1078	Cesium Sugar 40/56	55	Probe Sugar 40/48	150	1478
20	154	1038	Cesium Sugar 40/64	56	Probe Sugar 40/48	155	1478
21	159	1407	Cesium Sugar 40/72	57	Probe Sugar 40/56	147	521
22	153	831	Cesium Sugar 40/80	58	Probe Sugar 40-56	158	2482
23	163	764	Cesium Sugar 40/24	59	Probe Sugar 40-64	148	850
24	151	1199	Cesium Sugar 40/16	60	Probe Sugar 40/64	150	1259
25	154	1526	Cesium Sugar 40/24	61	Probe Sugar 40-72	137	783
26	153	1360	Cesium Sugar 40/32	62	Probe Sug 40-72	147	1588
27	149	971	Cesium Sugar 40/40	63	Probe Sugar 40-80	138	442
28	150	737	Cesium Sugar 40/48	64	Probe Sugar 40-80	149	1501
29	154	832	Cesium Sugar 40/56	65		181	523
30	151	872	Cesium Sugar 40/64	66		164	180
31	150	665	Cesium [illegible]	67	Probe Sugar 40-16	137	830
32	159	1530	[illegible]	68	Probe Sugar 40-16	140	592
33	153	516	Cesium Sugar 40/8	69	Probe Sugar 40-16	133	653
34	158	903	Cesium Sugar 40/16	70	Probe Sugar 40-16	140	270
35	149	1310	Cesium Sugar 40/24	76		154	690
36	149	1170	Cesium Sugar 40/32	77		154	363

Order No.	Life in minutes	C.P. per H.P.		Order No.	Life in minutes	C.P. per H.P.
78	angle 20 652	Hugo 155		105	Prelim Licorice 531 24	147
79		135		106	Bamboo Licorice 212 32	140
80	1 889 ×	Prelim Molasses 48 138		107	Prelim Licorice 701 32	146
81		Bamboo Molasses 56 135		108	Bamboo Licorice 269 40	155
82	4 1424 ×	Molasses Prelim 56 138		109	Prelim Licorice 661 40	146
83	Microbell 851	173		110	Bamboo Licorice 216 48	152
84	angle 45 1042	165		111	Prelim Licorice 1055 48	164
85		Bamboo Molasses 64 136		112	Bamboo Licorice 499 56	149
86	1706	Prelim Molasses 151 64		113	Prelim Licorice 539 56	157
87	1242	Bamboo-Molasses 145 72		114	316	144
88	2679	Prelim Molasses 153 72		115	300	136
89	1375	Bamboo Molasses 80 146		116	Carbon, Cooler, Seeding tube 138	151
90	1342	Prelim Molasses 148 80		117	[illegible] 992	178
91	Put seeding tube through process	182		118	Prelim [illegible] 70	168
92	1 Molasses 1117	Seeding tube, Cooler 139		119	Bamboo Licorice 155 64	149
93	Seeding tube Cooler 1096	138		120	Prelim Licorice 1597 64	162
94	Bamboo-Hot sugar 718	56 138		121	Bamboo Lic 599 72	147
95	Hot Sugar 56 - 1421	Prelimy 56 146		122	Prelim Lic 1323 72	160
96	A Carbon-Hot Sugar 381	150		123	Bamboo Lic 1143 80	159
97	Molasses Hot Prelimy 32 pt	127		124	Prelim Lic 1152 80	168
98	4 Prelimy Hot Molasses 919	137		125	578	152
99	Carbon Hot Molasses 32 Set 666	148		126		
100		Bamboo Licorice 136 16		127	190	183
101	1 1011 ×	Prelim Licorice 142 16		128	1 560 ×	187
102		Bamboo Licorice 16 139		129	223	166
103	796	Prelim Licorice 142 16		130		135
104	362	Bamboo Licorice 144 24				

[TEST REPORT BY WILLIAM J. HAMMER]

T. A. EDISON,

Menlo Park, N. J., _____ 1881.

Order - Extra High on Pump

19 in Set

Life of longest - 4260 minutes

These lamps are assorted Copper + Silver Clamps. 10 being Cu, + 9 ag.

In the order of going They were as following

Cu	ag
1st	3rd
2nd	5th
4th	6th
8th	7th
10	9th
12th	11th
14th	13th
15th	17th
16th	18th
19th	

according to this the silver did not show any superiority

This set demonstrated the importance of bringing them to a high incandescence on the pumps.

Ag 4

There were a a number of these lamps arc'd (four) all of them silver & when arc'd the clamp was volatilized and deposited on the glass silvering the glass beautifully.

These copper clamps were not the deposit ones used at present but in form resembling the platinum ones.

Extra High on Pumps. Sept.

T. A. EDISON,

Menlo Park, N. J., _____ 1881.

Order 35.

Six Lamps in Set-
Made from Sample marked
D.D. 8X17 – 2nd Set.

Lasting Time of Longest – 858 minutes

Two of these arc'd & one
went up immediately none
of which were included in curve

Several of this set were
somewhat silvered opposite
the negative clamp on globe

T. A. EDISON,

Menlo Park, N. J., _____ 1881.

Order 156.

Set of "A" Size 8X10 drawing up "B" weights carbonized in New Furnace.

(The weights were placed in contact with loop at start)

Life of longest-Lamp 4260 Min

These lamps made fair records & were most of them considerably blackened some (the long lived ones) were very black.

They had silver clamps & glass opposite several was more or less silvered (opposite neg. clamp)

Two of these lamps after burning for some time altered somewhat — one from 118 Volts to 114 Volts
111 Ohms. to 93 Ohms

the other from 116 Volts to 108 Volts
" " 101 Ohms to 95 Ohms

T. A. EDISON,

Menlo Park, N. J., _____ 1881.

Order 193.

Set of 14 High Resistance Lamps, measuring cold about 1000 Ohms.

Life of longest lamp in this set 3200 min @ 4 8 Candles.

I find that in the generality of globes in this & other sets that the discoloration occurs most opposite the faces of the carbons, opposite the breaking point (from arcing & volatilization of carbon) & opposite the negative clamp, the latter discoloration almost invariably occurring.

There was one lamp in this set in which the shank of the carbon was split so that the carbon was more or less incandescent

down into the clamp - this has frequently been the case but I have noticed that - the life of the lamp has been but little affected thereby, having most of them made good records.

The breaking points in this set seem to be unusually distributed through on the right (negative) side.

Vacuums all good and no arcs occurred in the 14.

For Average Ft-lbs, Volts & Ohms, also Time &c &c See Curve sheet of this Order.

W.L.H.

Order 193

T. A. EDISON,

Menlo Park, N. J., _____ 1881.

Order 202

Set of 42 "A" size Regulators 8X17 Bamboos, drawing up "B" size weights in patent cu. deposit clamps.

Clamps very heavily plated.

Plating around the shanks was carried by capillary attraction & up to incandescent part where it became volatilized, forming arc's in nine of them, destroying the vacuums of all, & changing the resistance of the carbon, the positive reducing (by deposit) to very much lower res, being very bright, while neg. side became very high & of dull red color. In the case of by far the majority of them the break occurred on the positive a very unusual occurrance under ordinary cir-

over

cumstances.

The carbons were changed by the deposit from the volatilized cu, from a jet-black to a dull gray.

Negative platina wire was considerably discolored in all, where the platinum passes through the solid glass

Positive clamps in all were more or less covered with fluffy black carrying deposit

Globes in these "cu deposit-clamp lamps" did not discolor as much as with ordinary platina + clamps - probably because of better contact.

Majority of these lamps showed bad vacuum blue around clamps after burning for some time from vol cu.

When arc formed in a number of the lamps the carbon was thrown on the glass in a fluffy deposit. noticed on a couple of them that there were little bunches of this feathery carbon hanging on to the carbon even while the lamps burned for a long time

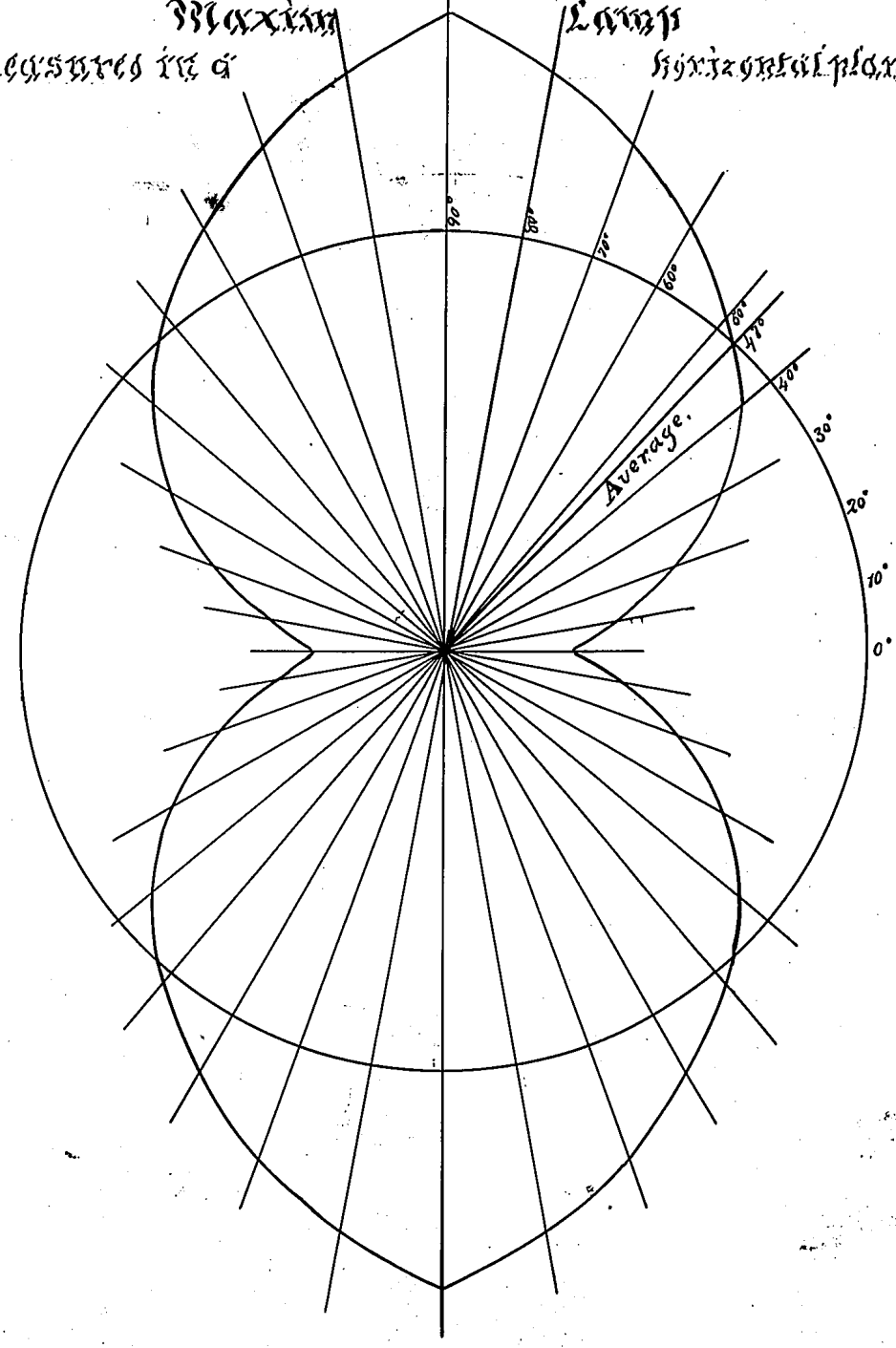
T. A. EDISON,

Menlo Park, N. J., 1881.

Noticed in several a blue fluorescence around the carbon half way up the side which was caused by a split in the carbon which formed an arc, this soon destroyed the carbon at that point

Time in Minutes of longest lived one 2150 min,
Shortest 165 min.
For Electro Motive Forces, Resistances, Time, per & &c &c See Curves,
I have just received another set prepared essentially in the same manner, but with improved method of plating, so far they are doing very well & will make a fine record I think combining as they do several very important features. W. J. H.

Curve Showing Illumination of Maxim Lamp measured in a horizontal plane.



1883. Electric Light - Edison Machine Works (D-83-034)

This folder contains correspondence and other documents relating to the business of the Edison Machine Works in New York City, which manufactured dynamos and large electric motors for the Edison electric light system. Much of the correspondence is by Charles L. Dean, superintendent of the machine works; by Charles Rocap, secretary; and by Gustav Soldan, Dean's successor as superintendent.

Approximately 70 percent of the documents have been filmed. The following categories of documents have not been filmed: weekly dynamo reports; weekly financial statements; orders; routine correspondence relating to shipping and supplies.

EDISON MACHINE WORKS,
104 Goerck Street,

New York, Jany 1st 1883.

T. A. Edison, Esq.
65 5th Ave.
City.

Dear Sir,

We have on hand at this date the following stock of dynamos:

Js.	Es.	Ks.	Ls.	Cs.
none	none	4	38	8

We have no orders in hand for any of this stock at this writing. We have only 3 Ks to ship for the Ds. Co. to complete their order for 35. These 3 we have received and on hand in addition to the 4 mentioned above. Of the 8 Cs. five are finished, and 3 partly done.

Yours truly,
Chas E Roesp

Dunwell,

1883-01-02

I enclose check & voucher for 625-61,03. You will see how same is made up. The lo. stock acc is all paid up and is taken on our books at 53 gov.
The Elect. Ry. owes us 7483.64 and with the 3. to be credited will bring it down to 7000.
We have 1661.03 still due from Mr B. and I thought it would be as well to square this off too. Please give me your check for 625-61,03 dated Dec 30/82

Rcd

Jan 2/83

OFFICE OF

Edison Machine Works,

104 Goerck Street,

New York, Jan 4th 1883

Thos A. Edison Esq

Dear Sir:

Your favor, enclosing N.M. Lyons note, is at hand, and in answer wish to say, that I do not desire to part with the planer, after so much work has been done to perfect it.

Yours Respectfully

Chas L. Dean

Per E.B.

12

Scott & Myers,
Auctioneers & Real Estate Brokers,
No. 8 Pine Street, N. Y.

Geo. H. Scott,
Sinclair Myers,

Scott & Myers

New York, July 16 1882

Stanton Street.

Price $80.000

45 feet

100 feet

100.98 96 94 92

Bowery

Stanton St.

Rivington St.

X #92. 94. 98 & 100 = Are four Story Brick Tenements.

X #96. Is a five Story Brick Factory with Engine Room

Form No. 3.

CABLE MESSAGE.

1883-07-06.

THE WESTERN UNION TELEGRAPH COMPANY.

All CABLE MESSAGES received for transmission must be written on the Message Blanks provided by this Company for that purpose, under and subject to the conditions printed thereon, and on the back hereof, which conditions have been agreed to by the sender of the following message.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
1274	Cable Paris		134 ~~434~~

Received at 84 Broad July 6 1883.

To Schenectady NY

Thos A Edison Esq

Cable price each type dynamo

G - (25 Lb) 175.

R - (50.) 250.

D - (100 ") 400.

S - (200.) 725.

Y - (300.) 1075.

H - (400) 1500.

3.5 - 1883 - 02.07

THOMAS A. EDISON,
No. 65 FIFTH AVENUE.

Rocap

NEW YORK 7th February 1883

Mr C. E. Rocap
Edison machine works

Dear Sir,
Please let me know by return absolute cost of Central Station Dynamo with Armington & Sims engine & packed ready for shipment.

I want to quote for four machines at lowest price today.

Yours truly

Saml Insull

The 15 Co we have last built cost including everything, engine & f.o.b. $8000. each.

Rocap

1883-02-10.

February 10th.

Mr. Chas. E. Rouse,

Edison Machine Works,

104 Goerck street, City.

Dear Sir:-

Inasmuch as my business is so large that it is quite impossible for me to give close attention to the details of it, and as I consider it better for my general interests to have all my financial matters under one charge, I desire for the future that all checks of the Edison Machine Works shall be "vouchered" for by Mr. Insull before presentation to me for signature, and that you shall consult him onall questions connected with the finances of the Works.

You will please, therefore, make arrangements with Mr. Insull to be at the Works such days as will be necessary in order to enable him to have a proper insight into such matters.

Yours truly,

1883-02-13.

EDISON MACHINE WORKS,
104 Goerck Street,

New York, Feby. 13th 1883.

Thos. A. Edison, Esq.
City.

Dear Sir,

I beg to acknowledge the receipt of your favor of 10th inst. and to say in answer thereto, that your desire shall be carried out in every respect.

It has always been evident to me that the position I have occupied would sooner or later become a subordinate one. That having now occurred, it is merely a question of time when I shall have to leave your employ.

So long as I have been permitted to work for your interests alone, I have always put forth every effort for success: but I cannot surrender my independence or become subservient to Mr Insull. The moment this is done my position becomes worthless, and there is no longer any inducement for one who has striven hard to promote his employers interests, to continue doing so.

I desire that the examination Mr Insull is about to make of the books, to be most thorough, and shall give him every assistance to that end.

Yours faithfully,
Chas E Rocap

1883-02-16

OFFICE OF

Edison Machine Works

104 Goerck Street,

New York, Feby 16th 1883

Samuel Insull Esq.

Dear Sir!

The man that did all the "Gold plating" for the shop, has not been in my employ for some time, and I am now having the plating done by outside parties, so I cannot tell when I will be able to give you the "receipt" required.

Yours Respectfully

C L Deane Sup

1883-03-05

EDISON MACHINE WORKS,
104 Goerck Street,

New York, March 5 1883

Thos A. Edison Esq!
65 Fifth Ave
Dear Sir!

Your favor of the 3rd Inst. is at hand & contents noted.
The following is a list of the old style Dynamos Boxed. The new style, we cannot give you any information about as yet as we have had none to box.

"Z" Dynamo – Boxed in 4 Boxes

Box containing	Field Cores & Keeper – weight		2120 lb.
" "	Bed Plate	"	600 "
" "	Armature	"	925 "
" "	Switchboard	"	40 "
		Total	3685 lb.

"E" Dynamo – Boxed in 2 Boxes

Box containing	Cores Field & Keeper weight		582 lb.
" "	Bed Plate & Armature		270 "
		Total	852 "

"L" Dynamo – Boxed in 6 Boxes

Box containing	2 Cores 1 Keeper & 1 Field weight		2120 lb.
" "	2 " 1 " & 1 "	"	2120 "
" "	Armature without Pulley	"	750 "
" "	Pulley, Pillow Blocks, Rails &c	"	720 "
" "	Switchboard	"	41 "
not Boxed –	Bed Plate skidded	"	916 "
		Total	6667 lb

Old Style Porter Armature without Pulley

1883-03-05

EDISON MACHINE WORKS,
104 Goerck Street,

New York, ... 188

(2)

"L" Dynamo – Boxed in 6 Boxes

New Style Boxes Cutting Pulley on armature

Box containing	2 Cores 1 Field + 1 Keeper weighs		2120 lb
"	"	2 " 1 " + 1 " "	2120 "
"	"	Armature with pulley "	850 "
"	"	Pillow Blocks, Rocker Arm etc "	501 "
Skidded	—	Bed Plate + rails "	1030 "
Box containing		Switchboard "	33 "
		Total	6654 "

"K" Dynamo Boxed in 7 Boxes

Old Style Boxes armatures without Pulley

Box containing	2 Cores 1 Field + 1 Keeper weighs		2120 lb
"	"	2 " 1 " + 1 " "	2120 "
"	"	2 " 1 " + 1 " "	2120 "
"	"	Armature without Pulley	1012 "
"	"	Pulley, Pillow Blocks Rails etc	645 "
"	"	Switchboard	41 "
Skidded		Bed Plate	1440 "
		Total	9498 "

"K" Dynamo – Boxed in 7 Boxes

New Style Boxes Armature with Pulley

Box containing	2 Cores, 1 Field + 1 Keeper weighs		2120 lb
"	"	2 " 1 " + 1 " "	2120 "
"	"	2 " 1 " + 1 " "	2120 "
"	"	Armature with Pulley "	1115 "
"	"	Pillow Blocks, Rocker Arm etc "	416 "
"	"	Switchboard "	33 "
Skidded		Bed Plate "	1554 "
		Total	9478 "

1883-03-05

EDISON MACHINE WORKS,
104 Goerck Street,

New York, Mar 5 1883

(3)

"C" Dynamo - 3 Bed Plates + 18 Cases

Box	Containing	Top Field	weighs	11360 lbs
"	"	1 Bottom "	"	5415 "
"	"	1 " "	"	5415 "
"	"	1 Middle "	"	5350 "
"	"	1 " "	"	5350 "
"	"	1 Engine	"	6730 "
"	"	Armature	"	11640 "
"	"	1 Keeper	"	1200 "
"	"	1 "	"	1200 "
"	"	1 "	"	1200 "
"	"	1 "	"	1200 "
"	"	1 Pillow Block	"	1200 "
"	"	1 " "	"	1200 "
"	"	1 Zinc Base (Field)		620 "
"	"	1 " " (Keeper)		160 "
"	"	Sundries - Bolts etc		600 "
"	"	" " Eccentric &c		1200 "
Not Boxed		Engine Bed Plate		4680 "
"	"	Arma. " "		4200 "
"	"	Core " "		2175
			Total	72095 lbs

You will notice by the above that we give two different accounts for the K + L Dynamos. The reason is, that in the original shipments

1883-03-05

EDISON MACHINE WORKS,
104 Goerck Street,

New York, Mar 5 1883

(4)

the Pulley was packed separately from the armature & this proved a constant source of trouble, as armatures were ordered in a hurry & shipped out without their pulleys, which caused a double shipment every time such was the case. Therefore it was decided to pack the pulley & armature in one box & this change altered the size of boxes & necessarily their respective weights, although to no great extent.

The Blower used for a "C" Dynamo is Sturtevant's #6 — costing $97 75/100 Net.

The only extra parts shipped with any dynamo, unless otherwise instructed, are the brushes, which number as follows for the various machines.

	Home Shipments	Foreign Shipments
"E" Dynamo —	extra	8 extra
"Z" "	6 "	10 "
"L" "	4 "	8 "
"K" "	4 "	8 "
"C" "	"	20 "

Yours Respectfully

Established 1855.

The George Place Machinery Company,

Railway and Machine Shop Equipment,

121 Chambers & 103 Reade Streets,

P.O. Box 1119.

New York, Mch 7th 1883

Saml Insall Esq
Jersey City

Dear Sir

When I stated to you that we would allow 25% off on all that is represented in our shafting catalogue I made a slight mistake you will notice by looking at the last page in the catalogue which gives price for hangers that our list price are exceedingly low, lower than any other self oiling or adjustable hanger we know of, we always get full list price for these hangers but we will allow you 5% off in the shafting coupling pulleys the discount is 25%, but please bear in mind what I have stated to you several times that we will in every case meet competition.

Yours Truly

THE GEORGE PLACE MACHINERY COMPANY.

1883-03-10

Established 1855.

The George Place Machinery Company,

Railway and Machine Shop Equipment,

121 Chambers & 103 Reade Streets,

P.O. Box 1119. New York, Mch 10th 1883

Carl Ingall Esq
N Y City

Dear Sir

Below we give you prices of different sizes of McMahon & Carrero Friction clutch

$10 – 20 – 30 – 40 – 50 – 75 – H.P.
$20 – $32 – $42 – $55 $70 – $100 –
100 – 125 – 150 & 175 Horse power
$135 – $160 – $180 – $206

From these prices we will allow you a discount of 5%

Don't forget we will meet any price on equal quality of goods you know we always try to sell the very best of everything.

Yours Truly

H Maiver

1883-03-12

TO T. A. Edison Esq

OFFICE OF
EDISON MACHINE WORKS,
104 GOERCK STREET,
NEW YORK, Mar 12 1883

Dear Sir!

Just received your note of even date. I will prepare to try the experiment referred to & will probably be ready in a short time from now.

Yours Respectfully
C L Dean
Esq

12
1883-04-03

OFFICE OF

Edison Machine Works,

104 Goerck Street,

New York, April 3 1883

Send check to Jas C D

S Insull Esq

Dear Sir.

We rec'd Wednesday last notice that unless Gas bills were paid in 24 hours the Gas would be cut off. Racap promised check on Saturday but forgot it in the hurry of moving

Please hire enclosed check signed and mail the same to oblige

Yours &c

Randolph

1883-04-27

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
473	J P	R	29 Collect

Received at **791 BROADWAY.**

Dated Plainfield N J April 27 1882

To S Insull 65 5 Ave

Only deposited what you got from Keasing Judged not give anything further to Daugherty Just now there are no bills pressing will try to be in monday

J Roach

This telegram has just been received at the office in 791 BROADWAY, near Tenth Street, where any reply should be sent.

DIRECT WIRE.

1883-04-27

Randolph

Please take this out to Rocap & do not fail to let me have an answer by tomorrow morning Saturday - You read the note & you will see I ought to have an answer

Insull

Insull,

Some note to hand you gave Dougherty note for Feb a/c, such a/c is scarcely overdue, and there are others more deserving than he. I should make him wait. Montgomery + Wilkinson you can pay if you like. They are small a/cs - I know nothing about the 2nd 500 lb. for Chicago. I should have shipped it on condition that we could have drawn for it tomorrow, but don't know what was done at all. I doubt if you could use another draft at B & M - even should Chicago allow one, you

3/ 1883-04-27

Apr 27 83

Inner Roap

done so you need not
hurry about getting
back until you are
thoroughly well —

Insull

Be sure to let me
have answer tomorrow
(Saturday) morning.
Pay Roll is $732.10
I want you to know
what you deposited
last Saturday — I think
it was $500.00 but am
not sure.

can see Mr Schell
Prest.
Last Saturday
I did not wait for
check but Allen
promised me he would
deposit to our cr.
See him for amt.

Rodgers

1883-04-28

S. Insull, Esq.

Apr. 28, 83

Dear Sir: Randolph

Roach was not so well yesterday, He can scarcely drag himself around the House, he ought not to do that.

about the Draft as Roach says, you can hardly draw on Chicago Co without permission, you can of course telegraph them for the favor of doing so, if answer is favorable you can draw at once, I would of course find out at the bank ~~other~~ if they would allow you to check out against Draft if they will not, you can mail bill to Chicago Co. and get check doubtless by return mail,

We have blank drafts and Clerk will show how to draw them they are — at sight — pay to the order of ourselves

Fifteen Hundred Dollars —

Value Rec'd and charge to a/c of —

Western Edison Light Co

— over —

E. M. Wolcott

I dont think Lacapo is dangerously sick provided he is prudent enough to avoid relapse —

Will see him to morrow if you have anything to suggest

in haste Randolph

1883-05-21

EDISON MACHINE WORKS,
104 Goerck Street,

New York, May 21st 1883

Samuel Insull Esq.
Dear Sir!

Your's of the 19th inst duly to hand & contents noted.

We are going to use 80 lbs #16 B.W.G. .065" Diam Hard Triple Cotton & Camphor Covered Copper Wire for each ~~1400~~ Lt Armature & 65 lbs for each core or 390 lbs for each Dynamo, of Double Cotton Covered #16 B.W.G. .065" Diam Copper Wire. Trusting that this information is satisfactory, I remain,

Your's Respectfully

C. L. Dean Supt
Per E.J.B.

1883-05-28

OFFICE OF

Edison Machine Works.

104 Goerck Street,

New York, May 28th 1883

Saml Insull Esq!

Dear Sir!

Your's of the 26th came to hand this morning with Mr Cowles letter attached.

I herein send you the sample required & also return Mr Cowles letter as requested.

Your's Respectfully

A L Dean Supt

1883-06-01

THOMAS A. EDISON,
No. 65 FIFTH AVENUE.

NEW YORK June 1st 188 3

Edison Mach. Wks
104 Goerck St
City

Dr Sirs,
Will you please let me have a list of the due dates and amounts of any notes that you may have given

Yours truly

Saml Insull

Note	to	Doughty	due	June	26	$616.73
"	"	"	"	July	10	711.99
"	"	Damas Gill	"	"	24	699.91
"	"	R. Shapter	"	Aug	5	655.41
"	"	Printing Co.	"	"	18	908.42
"	"	P. Carraher	"	"	24	585.17
"	"	Pinson Co.	"	Sep	1	749.75

June 5/83 Over Recd

Dougherty 880

Hubbard 4

Chauncey Mark, Jr. Mayor
Hoboken, N.J.

Dear Sir: 11 June 1923

Yours of the 9th received. Thanks for your letter of the 6th. We assume from your letter that you have found your man today.

Very truly yours,

1883-06-05

COPY.

June 5th. 1883.

C. E. Rocap, Esq.

Edison Machine Works,

104 Goerck Street, City.

Dear Sir:-

The following are the selling prices of dynamos quoted by me to Mr. Moore of the Isolated Co.:-

25	Light Machine,	$175.00
50	" "	250.00
100	" "	375.00
200	" "	725.00
300	" "	1,075.00
400	" "	1,500.00

Please note the above and oblige,

Yours truly,

(Signed) Thos. A. Edison.

1883-07-05

July 5 1883

Insull

Dynamo report will follow later. I cant get data owing to absence of hands in charge of armature Room, Roof

1883-07-06

EDISON MACHINE WORKS,
104 Goerck Street,

New York, July 6th 1883.

S. Insull, Esq.
65 5th Ave.
City.

Dear Sir,

Replying to yours of 3rd inst. Mr Edison gave Mr Moon the following prices:

for 25 light machine		*175.
" 50	"	250.
" 100	"	375.
" 200	"	725.
" 300	"	1075.
" 400	"	1500.

400

After having carefully considered the matter of cost of raw material and labor I think the prices quoted, for the 25, 300 and 400 light machines, with fair business will yield a good profit. If these machines could be turned out in 100 lots I believe as a result 40% net profit would accrue, at the selling prices named. This percentage of course would decrease on smaller lots, and I think 40% to be about the maximum, so far as the product is concerned.

The prices given on the 50 and 100 light machines are too low. *25. should be added in each case, and with this increase, under the same conditions as mentioned above not over 30% net profit would result.

As to the 200 light machine, the developments thus far indicate a comparatively costly dynamo, since it requires 4 cores. The 300 light machine requires but 4 cores. You will note that the 400 light dynamo has 6 cores,

1883-07-06

EDISON MACHINE WORKS,
104 Goerck Street,

New York, ... 188

and sells for $1500. the 200 light 4 cores for $1075. the 200 light 4 cores for $725. It is true the 100 light machine has 4 cores, but they are very small, and this dynamo has developed remarkable capacity. It would seem that we get more out of some dynamos in proportion to the material and cost than out of others. We may be able on the 200 light to reduce enough on material and labor to make the difference in cost compared with the 300 light, equal the difference in their selling prices: but if 4 cores are used I very much doubt it. Yet we do not seem to get the required capacity out of 2 cores. The tests by which Mr Dean is guided in getting out his models for the 200 and 300 light machines were both made with an 'L' dynamo. On the 200 lt 4-7 in. cores with 65 lb. wire on each core were used. Armature was 15 in long and had 64 com. bars with 65 lb. wire, and on the 300 lt. 4-8 in cores with 95 lb. wire on each core were used. Armature an old 'L' 55 volt was used which is 22 in. long, has 54 bars and 65 lb. wire.

If this data is followed in getting out the models, I do not believe there will be a difference of $150. in the cost of these two machines.

The indications are I think that some experimenting should be done further with the 200 lt machine before going ahead.

In conclusion let me give the gross cost of our old dynamos, which were built last summer under the most favorable conditions

1883-07-06

EDISON MACHINE WORKS,
104 Goerck Street,

New York, ... 188

and also the probable cost of the new ones.

K. dynamo	250 H.	$ 887.67	in a lot of	125
L. "	150 "	665.63	" " " "	150
J. "	60 "	330.89	" " " "	100
E. "	15 "	128.48	" " " "	50
A "	400 "	$1000.	" " " "	100
"	300 "	700.	" " " "	"
"	200 "	550.	" " " "	"
"	100 "	300.	" " " "	"
"	50 "	200.	" " " "	"
"	25 "	125.	" " " "	"

Yours very truly,
Chas E Roesp

1883-07-25

Answered July 26 1883 N. S. Keith

OFFICE OF
Edison Machine Works,
104 Goerck Street,

New York, July 25th 1883

T. A. Edison Esq
Construction Dept.

Dear Sir!

We have this day shipped to the Edison Electric Illum. Co. Shamokin. Pa. per C. R. R. of N. J., ten (10) Babbit Bearing Boxes. Six of them are to replace the Phosphor Bronze Boxes now in the Dynamos and the other two pairs are the extra ones ordered on your order #14, thus completing the same.

Your's Respectfully
C L Dean Supt
Per E J B

P.S. We enclose shipping receipt, so that you can forward it to the right party or parties.

1883-08- Form H.

THOMAS A. EDISON,
Central Station, Construction Dep't,
NO. 65 FIFTH AVENUE,

New York, Aug. 11th 1883

My dear Mr. Edison:

I am anxious to know all about the machine you are making for me. I understand from Bergmann that the armatures at your Goerck St. shops.

Please write me a line giving dimensions of machine, and the size and speed of pulley.

Also please state when it will be ready for delivery.

Yours, truly
N. S. Keith

1883-08-13

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

AUG 14 1883
ANSWERED

New York, August 13th. 1883

FILE No.

Charles E. Rocap, Esq.

Edison Machine Works,

104 Goerck Street, City.

If a set of boxes cost the machine works $25, there must be something damnably rotten at the machine works =

Dear Sir:-

Referring to the enclosed bill, dated the 25th. July, for Babbit bearing boxes sent to Shamokin, I beg to draw your attention to the fact that you have charged $30. a set for these boxes, which is the same price that you charge for phosphor bronze boxes. It seems to me that such a price is out of proportion to the value of the boxes. So far as I understand it they are simply cast iron pieces lined with Babbit.

It is my impression that when settling up with the Shamokin Company, if we presented any such charge there would naturally be a "kick", so return you the bill assuming that there must be some error in billing them at such a rate.

Very truly yours,

Samuel Insull

Insull,
There is only a difference in wt. of 1 1/2 lbs. between a set of Babbit & Phosph. bronze boxes. The Bronze costs us 32¢/lb, the Babbit 36¢. a set of boxes costs us $25.
Rocap

Enclosure.

1883-08-16

EDISON MACHINE WORKS,
104 Goerck Street,

New York, Aug 16th 1883

Samuel Insull Esq
65 Fifth Ave.
Dear Sir!

This day I received a letter from Mr J Hutchinson, asking me to deliver the 8½ x 10 A+S. Engine and the "K" "B" Dynamo. to "Niblos Garden."

He mentions that he had made arrangements with you, about this Engine + therefore I write this letter to you.

I do not think I can spare this Engine, (and I have written so to Mr H. today) on account of not having any other to test with.

The P+A. Engine will not be ready for a week or two; so if I send the 8½ x 10 away, I will be idle until the former is ready for work. I asked Mr Hutchinson to let me know if he could arrange the matter so that I could keep this; but if he couldn't I would have to let him have it.

Yours Respectfully

C. L. Deane Supt

P.S. Without this Engine Mr Clarke cannot test his instruments

1883-C.2.13

New York Aug 18th/83
Samuel Insull Esq
Dear Sir I hereby refer to you the following statements of Mr Wheatley Brassfinisher &c regarding D—n that Mr Wheatley was forced to give up the work on account of the demands of D—n which amounted to far more than the profits of the work, Mr Wheatley says that D—n is aided and abetted by parties in office in Green St. And says one Williams had contracts and paid at least 25 per cent to D—n Mr Wheatley is at Lewis St Bowery Houston & 2nd Sts.
Henry Fraser worked at the shop received $9— was on the pay rolls at $12 says that large lots of material was sold by D—n while he was employed there Fraser will return to the city next week. These facts will be corroborated by Mr Elder

Mr Paine Mr Farrell
Davidson & Potter
The woman D—n keeps
has several thousand dolla
rs in the bank which
she received from D—n
I will be able to give
some very decisive facts
on Thursday when I meet
Mr Farrell

Respectfully Yours
Wm Anderson

1½
Cousin Pinkerton
Wm Anderson

1883-08-20

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ELECTRICITÉ

Grand Diplôme d'honneur

PARIS 1881

579

Ivry-sur-Seine. le 20th Aust 1883

5, RUE DU PARC.

S. Insull Esqre
66 Fifth Avenue.
New York.

My dear Insull

In answer to your letter of 4th inst only to hand this evening, I would say that Cunningham has left for America, I therefore cannot speak to him about it.

I had an idea, from the time you told me that Baan had made so much money by contract, that there was something very crooked about it and if I had had time when in America, I should certainly have asked you to open up the books for me. Tell Edison that, if he finds anything of this sort he ought to take very strenuous measures as there is nothing we can lose more money in than a dishonest manager.

Yours faithfully

Charles Cheltn

1883-08-20

Southwark Foundry and Machine Company,

ENGINEERS AND MACHINISTS,

SOLE MAKERS OF

THE PORTER-ALLEN HIGH SPEED STEAM-ENGINE,

BLOWING ENGINES, WATER-WORKS PUMPING ENGINES, STEAM PUMPS, CENTRIFUGAL PUMPS, MINE PUMPS, HYDRAULIC ELEVATORS.

No. 430 WASHINGTON AVENUE.

JOS. L. FERRELL, GENERAL MANAGER.
CHAS. B. RICHARDS, SUPERINTENDENT.
G. A. BOSTWICK, SECRETARY AND TREASURER.

Philadelphia, Aug. 20 1883

Dear Mr Lusell,
I have your favor of 18th inst advising me that the Engine at Green St will be ready for us on Thursday or Friday next. We will govern ourselves accordingly.
I would feel greatly obliged if you could this week favor me with a settlement of "Machine Works" account I am making certain arrangements which would be greatly facilitated if you could kindly aid me in this matter.

Yrs truly yours

SOUTHWARK FOUNDRY & MACHINE CO.,
Jos. L. Ferrell
General Manager.

Address all communications to the Company.

1883-08-20

Southwark Foundry and Machine Company,

ENGINEERS AND MACHINISTS,

SOLE MAKERS OF

THE PORTER-ALLEN HIGH SPEED STEAM-ENGINE,

BLOWING ENGINES, WATER-WORKS PUMPING ENGINES, STEAM PUMPS, CENTRIFUGAL PUMPS, MINE PUMPS, HYDRAULIC ELEVATORS.

No. 430 WASHINGTON AVENUE.

JOS. L. FERRELL, GENERAL MANAGER.
CHAS. B. RICHARDS, SUPERINTENDENT.
G. A. BOSTWICK, SECRETARY AND TREASURER.

Philadelphia, Aug 20th 1883

Saml Insull Esq.
Edison Illuminating Co.

Dear Sir:

As we have made a number of new parts, which we wish to apply to the engine you kindly propose to put at our disposal at Goerck St. we shall have occasion to fit the new pieces to the old; and to facilitate this we will thank you to send to us, by express, at once, the following parts of the engine which we are to deal with.

The Eccentric Straps and link complete, with its block and pins.
The Sustaining arm upon which the link rocks.
The rod which leads from the link block to drive the steam valves.
The two suspension links by which this rod is hung to the end of the governor lever.
The governor levers with the pin which connects them together and forms the axis on which they turn.
The steam valve rock shaft with its two levers.
The Exhaust valve rock shaft with its two levers.

Yours very truly

C. B. Richards.

Address all communications to the Company.

1883-08-23

WILLIAM A. HARDING,
Professional Accountant,
Rooms C. & D.
N. Y. Life Insurance Building,
No. 346 Broadway,
P. O. Box 1160.

NEW YORK, August 23rd 1883

Samuel Insull Esq Private Secy
T. A. Edison Esq No. 65. 5th Ave City.

Dear Sir - Your favor of 22nd received I will be on hand Monday A.M. August 27th @ No. 104 Lexington St. at about 10¼ o'clock. Mr Wm. H. Palmer, one of my best accountants, is at Farmington Mass. but I expect him here to help me by Saturday next. I will commence work however Monday 10¼ o'clock A.M. Unless I hear from you by Saturday P.M. that you would prefer meeting me at another hour. I remain

Yours Very Respy
William A. Harding

1883-08-27

LAW OFFICES OF

ECCLESINE & TOMLINSON,

32 PARK PLACE,

THOS. C. E. ECCLESINE.
JOHN C. TOMLINSON.

NEW YORK, Aug. 27th 1883

Received from Mr Thomas A. Edison One hundred dollars ($100 00/100) on account of matter of Charles L. Dean.

Ecclesine & Tomlinson

1883-08-27.

EDISON MACHINE WORKS,
104 Goerck Street,

New York, Aug 27th 1883

Mr Insull.
65 Fifth Ave
Dear Sir!

Enclosed. I send you a statement of all the bills to be paid by these works and also one showing the amounts due them, as required by you.

On the stubs of the Notes, given to Armington & Sims Co. dated Aug 2/83 & Jno N. Sickels, dated Aug 20/83, there is no mention whether they were Isolated Co. Notes or not. They have no numbers, as the regular Machine Works Notes have.

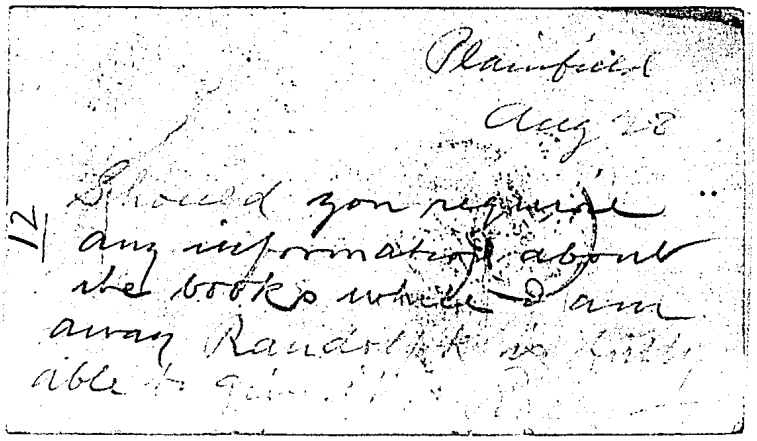
If these are the Isolated Co's Notes, then please deduct $1407 88/100 from the amount against them.

Yours Respectfully.
Ernest J Berggren

P.S. Most of these A/cs Payabable accounts, have been running for some time and we have been visited by nearly all the parties concerned. Damrat & Bell have been urging us, as well as Nathan and Dreyfus, John Roach & Thompson & Dorrance, more than any one else.

E J B

[TO SAMUEL INSULL]



Plainfield
Aug 28

12 Should you require
any information about
the books which I am
away Randolph will be
able to give

1883-08-29

Southwark Foundry and Machine Company,

ENGINEERS AND MACHINISTS,

SOLE MAKERS OF

THE PORTER-ALLEN HIGH SPEED STEAM-ENGINE,

BLOWING ENGINES, WATER-WORKS PUMPING ENGINES, STEAM PUMPS, CENTRIFUGAL PUMPS, MINE PUMPS, HYDRAULIC ELEVATORS.

No. 430 WASHINGTON AVENUE.

JOS. L. FERRELL, GENERAL MANAGER.
CHAS. B. RICHARDS, SUPERINTENDENT.
G. A. BOSTWICK, SECRETARY AND TREASURER.

Philadelphia, Aug 29th 1883

Samuel Insull Esq.

Dear Sir:

The inability to procure the parts of the experimental engine occasions some delay in completing our preparations for the tests, and we would prefer to postpone action in the matter until after the return of Mr. Ferrell from an absence from home which will continue until Wednesday next, immediately after which he hopes to visit you again.

Meanwhile as there are weighty reasons why we wish to obtain from you the promised settlement of our account, we shall esteem it a favor if you will send us the remittance before Saturday or Monday next.

Yours very truly

SOUTHWARK FOUNDRY & MACHINE CO.,

Chas B. Richards. SUPT,

Address all communications to the Company.

1883-08-30

EDISON MACHINE WORKS,
104 Goerck Street,

New York, Aug 30th 1883

Saml Insull Esq
65 Fifth Ave
Dear Sir!

Enclosed please find check for $147 02/100 from Dr Richards & Co in payment of the accompanying Edison Machine Works bills.

Please receipt these bills & return them to me so that I can deliver them to Dr Richards & Co oblige.

Yours Respectfully
E J Berggren

P.S. Mr Soldan says he cannot have any more "H" Dynamos ready for shipment before next week. He thinks he will have the 2 ready for Lawrence by Tuesday; but not before, on account of the 100 Sr Dynamos Mr Hutchinson wanted at the end of this week.

EJB

1883-08-31

EDISON MACHINE WORKS.
104 Goerck Street,
New York, Aug. 31st 1883

RECEIVED
SEP 5 1883
ANSWERED

FILE NO.

Write Sayers & will make Thursday Sep 6 1883 $300 each payment on delivery

Thos. A. Edison Esq.
65 Fifth ave

Dear Sir

Your letter dated yesterday asking for blue prints of the details of the "H" & "J" Dynamos is at hand.

The tracings are not quite finished but as soon as they are, I will send them to you.

You can safely close the contract for the 2 Crank shafts at $300 # each.

Yours Respectfully
Gustav Lorz
Supt

1883-08-31

EDISON MACHINE WORKS,
104 Goerck Street,

New York, Aug 31 1883

J Hutchinson Esq
65 Fifth Ave
Dear Sir!

Please let me know where you want the "T" Dynamos shipped to, that you wanted this week, so that our men will know, whether to box them for foreign shipment or not. oblige

Yours Respectfully
E J Berggren

Send I think these Dynamos ~~over~~ to New England Dept J.H.

1883-09-05

File

OFFICE OF

Edison Machine Works.

104 Goerck Street,

New York, Sep 5th 1883

Saml Insull Esq
65 Fifth Ave

Dear Sir!

Your's of yesterday at hand. Enclosed please find the original letters & telegram sent by Mr H.C. Blackmer and also copies of letters & telegram sent to him by the Edison Mch. Works.

The enclosed is everything I can find relating to H.C. Blackmer.

Please return his letters as soon as you are through with them & oblige.

Your's Respectfully
E. J. Berggren

1883-09-06

RECEIVED
SEP 7 1883
ANSWERED

EDISON MACHINE WORKS,
104 Goerck Street,

.....188...

New York, Sep 6th 1883

FILE NO.....

Saml Insull Esq!
65 Fifth Ave
Dear Sir!

The H Armature received from Boston Herald on the 3rd Inst has its Shaft journal on the Pulley side badly cut, which will necessitate turning off & consequently the bearing box now in the machine, will not be available.

I will therefore have to make a new box for this journal; but I wish you would ask the Isolated Co what to do. Awaiting your reply, I remain

Yours Respectfully
Geo Gordon
Supt

E. Co Written for
Railway Gordon
Work

1223-09-06

EDISON MACHINE WORKS,
104 Goerck Street,

New York, Sept 6th 1883

Saml Insull Esq
65 Fifth Ave.

SEP 7 1883
ANSWERED
Sept 7 1883
FILE NO.

Dear Sir!

Your's of this date asking for weights & measurements of the 25 Lt Boxes, is at hand.

The following is a complete list. In a few cases I was obliged to calculate the weights, but I am certain, I am not more than a couple of pounds out of the way.

There are five cases in all.

2 Boxes, measuring 33"x18"x9 – 380 lbs Each – Contain Cores & Keepers
1 " " 16 x 12 x 19½ – 180 " " Field (complete)
1 " " 9 x 9½ x 34¼ – 106 lbs " Armature & Pulley
1 " " 37 x 2 x 17 – 350 " " Bed Plate, Pillow Block &c

The size of pulley is 5" Diam x 4" Face and the armature makes 1600 revolutions per minute.

Your's Respectfully
Gustav Robbins
Supt

25 Lt Mach:
Extends 35½" from floor
Size of Bed Plate 31 x 17½"

1883-09-12

THE EDISON COMPANY
FOR ISOLATED LIGHTING.

GENERAL MANAGER'S OFFICE,
65 FIFTH AVENUE.

Please address reply to the undersigned.

New York, Sept 12th 1883

Edison Machine Works.
City

Gentlemen:

Referring to quotations for new dynamos, we beg to give below the prices given by Mr. Edison

25	light	$175.
50	"	250.
100	"	400.
200	"	725.
300	"	1075.
400	"	1500.

Yours truly

FOR M. EDISON

J. Hutchinson

1883-09-12

RECEIVED
SEP 13 18
ANSWERED
FILE NO.

OFFICE OF
Edison Machine Works,
104 Goerck Street,
New York, Sept 12th 1883

Sep 13 Send them up to Partridge
Yes
Let them go ahead
Get planning
why you send them

Sam'l Insull, Esq
65 Fifth Ave.

Dear Sir:

In regard to the "Boston Herald" arma, I would ask you whether to send the set of babbit boxes I had scraped down to fit the journals or not otherwise I do not think the arma will run properly in the pillow blocks, as the arma was turned down. awaiting your instructions - I remain

Yours Respectfully
Gustav Sutzy Supt.

P.S. They have Phosphor Bronze bors + want Babbit instead

1883-09-12

SOCIÉTÉ INDUS^elle & COMM^le EDISON

Société Anonyme. Capital : 1.500.000 Francs.

549 à Ivry s/ Seine, 5 Rue du Parc

Grand Diplôme d'honneur PARIS 1881

Ivry, le Sept. 12th 188 1883.

My dear Insul,

I was afraid that something like what you tell me would happen as regard Goerck St Machine Works — If it is not worse I shall be satisfied — You know Dean must have paid an enormous sum to the piece work men there to make the price so high — I am anxiously awaiting the results of the enquiry

Very truly Yours

Chas Batchelor

1883-09-14

RECEIVED SEP 20 ANS.

OFFICE OF

Edison Machine Works,

104 Goerck Street,

New York, Sept 14 1883

FILE No.

Thos A. Edison Esq.
65 Fifth Ave

Dear Sir:

The dimensions of pulley for "H" Dynamo, to be shipped to Genoa is 14" dia x 12½ face, Revolutions from 1050 to 1060 per minute.

If we receive order from Isolated Co. for H. Dynamo we can ship it, four hours after receipt of order

Yours Respectfully
Gustav Lodin Supt.

1883-09-14

OFFICE OF

RECEIVED SEP 20 ANSWERED

Edison Machine Works,

104 Goerck Street,

..... 188..

FILE No.....

New York, Sept 14 1883

Saml Insull Secy
65 Fifth ave
Dear Sir;
We are all out of large letter pads, and we need some, would you please order some, we never gave Arthur Bonnell an order from order book for such.

Yours Respectfully
~~Enoch Arden Supt~~

Mr Bergen
Please see me about Form numbers for the

1883-09-14

OFFICE OF

RECEIVED SEP 14 1883 ANSWERED

Edison Machine Works,

104 Goerck Street,

Sept 14/1883

FILE No.....

New York, Sept 14 1883

Saml Insull Secy
65 Fifth Ave
Dear Sir;
The pay roll is all made up, with the exception of contracts, if you want any to go in this week if not, do you want pay roll sheet and envelopes up at Fifth ave.

Pay Roll amounts to $ 851.42
Contracts " " 1048.62

Yours Respectfully
Alphons Wester

1883-09-15.

OFFICE OF

Edison Machine Works,

104 Goerck St.

New York, Sept 15 1883

RECEIVED SEP 17

TELEGRAM NO.

Sep 17 3

Thos. A. Edison

65 Fifth ave;

Dear Sir;

There is no difference between the "L" & "H" Brushes in themselves but the "L" Brush is soldered to the trough while the H. Brush is moveable in a shorter trough which is fastened to the Brush Holder

Yours Respectfully

Francis Robbins Supt

The brushes are made so that they cannot be substituted

1883-09-20

Southwark Foundry and Machine Company,

ENGINEERS AND MACHINISTS,

SOLE MANUFACTURERS OF

THE PORTER-ALLEN HIGH SPEED STEAM-ENGINE,

BLOWING ENGINES, WATER-WORKS PUMPING ENGINES, STEAM PUMPS, CENTRIFUGAL PUMPS, MINE PUMPS, HYDRAULIC ELEVATORS.

No. 430 WASHINGTON AVENUE.

JOS. L. FERRELL, GENERAL MANAGER.
CHAS. B. RICHARDS, SUPERINTENDENT.
G. A. BOSTWICK, SECRETARY AND TREASURER.

Philadelphia, Sept. 20 1883

Mr. Saml. Insull

Dear Sir.

I regret very much that you have been ill. I inferred that you were either ill or away from the City or I should have heard from you before. From the tenor of our conversations recently, I had concluded that I was perfectly safe in relying on you for the Amt. of the Machine Work account before now and I did so rely. I had a payment of $3000 to make this week and felt sure of your aid. I am much disappointed, but must try to wait next Tuesday, your check in settlement. The new High Speed Engine is doing practical work aiding in driving the Machinery here and doing it readily. You & Mr Edison should certainly see it.

Yours truly

SOUTHWARK FOUNDRY & MACHINE CO.

Address all communications to the Company.

Jos. L. Ferrell

General Manager

Form No. 1. Machine Works

1883-10-06

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
167	Co	W U Tel	1032

Received at 852 BROADWAY.

Dated Plainfield N J Oct 6 1883.

To D Inwall 165 S ave

Please send three twenty five Cash and three hundred Short Notes

C. E. Rocap

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

[INCOMPLETE. TO SAMUEL INSULL?]

Southwark Foundry and Machine Company,

1883-10.06

ENGINEERS AND MACHINISTS,

SOLE MAKERS OF

THE PORTER-ALLEN HIGH SPEED STEAM-ENGINE,

#2.

BLOWING ENGINES,
WATER-WORKS PUMPING ENGINES,

STEAM PUMPS,
CENTRIFUGAL PUMPS,

MINE PUMPS,
HYDRAULIC ELEVATORS.

430 WASHINGTON AVENUE.

JOS. L. FERRELL, GENERAL MANAGER.
CHAS. B. RICHARDS, SUPERINTENDENT.
G. A. BOSTWICK, SECRETARY AND TREASURER.

Philadelphia, 10/6, 1883.

Your promises to me were made the basis of absolute promises to my people, and I am sorely harassed about the matter. I want you to understand that there is nothing but the kindest disposition, but as I am pressed, so must I give a definite account of my stewardship, and I can only do so by your help.

We were over on Tuesday with our expert to see Engine at Machine Works. Our man will take the matter up next week.

Very truly Yours,

SOUTHWARK FOUNDRY & MACHINE CO.

Jos. L. Ferrell

General Manager.

Address all communications to the Company.

Machine Works

1883-10-08

WILLIAM A. HARDING,
Professional Accountant,
Rooms C. & D.
N. Y. Life Insurance Building,
No. 346 Broadway,
P. O. Box 1169.

HARDING & BURNAP, N.Y.
OCT 8 1883
P.O. Box 1169

NEW YORK, Oct 8th 1883

Thomas A. Edison Esq
Pres. Edison Machine Works No 65 5th Ave

Dear Sir

Your favor of Sep 25th was received. I have been absent from the City almost all of last week. On getting to my office this A.M. I do not find any letter for you. You wrote "I will send you a check early next week" i.e. now. Last week.

Kindly send check if it has not been sent and oblige

Yours Respectfully
William A. Harding

Plainfield Oct 10/83

Please take notice that if I do not receive a remittance from you tomorrow I shall draw on you at sight for $350.

Chas. E. Crocker

Blank No. 3. Machine Co.

1883-10-15

No. 23 **CABLE MESSAGE.** 821

THE WESTERN UNION TELEGRAPH COMPANY.

All CABLE MESSAGES received for transmission must be written on the Message Blanks provided by this Company for that purpose, under and subject to the conditions printed thereon, and on the back hereof, which conditions have been agreed to by the sender of the following message.

A. R. BREWER, Secretary. NORVIN GREEN, President.

Check 7 Berlin

Received at 832 Broadway Oct 15 1883

Edison 65 = fifth ave NY

When 35 fifty models.

Saldun will answer Edison

Fifty models 250 Forwarded

1883-10-18

THE EDISON LAMP CO.,

EAST NEWARK, N. J., Oct 18 1883

T. A. Edison Esq
65 5th Ave

Dear Sir:

Enclosed find circular describing wooden pulleys mentioned by me yesterday — The superintendent of their works offered to send you one as sample — and will make them — right size for "L" dynamo for about $5 each — I have seen a number in use and the users spoke highly of them

Yours John W. Howell

Mr Howell

I wrote Soldan re this some time ago — Have you had any reply?

Jake

70
Oct 18/83
J. M. Howell
Enclosure inventor

THE EDISON MFG. CO.

1883-10-23

IMPORTANT.

Merchants who have debts which they cannot collect, would do well to place them in a lawyer's hands, who can, if the parties be worth anything at all, force them to pay, where they otherwise certainly would not.

The undersigned has made a specialty of this branch of law business, and his terms are the lowest,—being 5 or 10 per cent. on the amount collected, according to trouble, and where it exceeds $300. one-half the above rates on the excess.

It will cost nothing to try to collect your debts, as, if no collection is made, no fee is charged.

It is surprising how careless merchants sometimes are in regard to claims which they cannot themselves collect, and therefore deem worthless. A large percentage of the profits in some businesses is swallowed up by bad debts, which, if they had been promptly attended to, might have been made to realize something. Debtors who pay no attention to their creditors' demands, will often settle at once if written to by an attorney, threatening immediate suit. Of course no suit will be brought without express advice from the client.

Collections made in all parts of the country.

Address communications to

JOSEPH J. McDERMOTT,
ATTORNEY AND COUNSELLOR AT LAW,
ROOM 27, 31 & 33 PINE ST., NEW YORK.

105 Fulton St., N. Y., Oct. 23d, 1883.

Messrs Edison Machine Works

Dear Sirs:

Allow us to introduce to you Mr. Joseph J. McDermott. He has been very successful as our attorney, and we recommend him to you most highly.

Very truly yours,

Montgomery & Co

Form 1 A. 1883-10-29

All Communications to be addressed to the Office.

Works, 104 Goerck Street.

EDISON MACHINE WORKS.

OFFICE, 65 FIFTH AVENUE.

New York, Oct 29 1883

Samuel Insull Esq

Dear Sir!

The following is a report giving the number of Dynamos we have been ordered to make, the number that are finished, sold, and those now under construction & on hand.

Ordered to make	Finished	Sold	On hand	Under Const.
10 "H" (400 Sr) Dynamos	10	4	6	—
10 Y (300 Sr) " "	1	1	—	9
10 G (25 Sr) " "	—	—	—	10
10 R (50 Sr) " "	1	—	1	9
10 S (200 Sr) " "	—	—	—	10
10 T (100 Sr) " "	10	—	10	—
1 Exp 200 Sr Dynamo	1	—	1	—

Yours Respectfully

Edison Mach. Works

Per E. J. Berggren

Orders not filled

Eight (8) 50 Sr Dynamos

Three (3) 25 " " "

Four (4) 200 " " "

Three (3) 300 " " "

One (1) 400 " " "

1883-11-05

J. S. Sweet, Prest.,
H. F. Stephens, Sec.,
A. A. Sweet, Treas.,

The Straight Line Engine Co.,

Cor. Geddes and Fayette Streets.

Syracuse, N. Y. 5th Nov 1883.

Thos. A Edison M. E.
65 - 5th Ave - New York -

Dear Sir:

Your esteemed favor of the 3d at hand and contents noted

The directors of our company are to hold a meeting on Wednesday - at which time your enquiry will be considered and - a reply given as soon as possible

Very respectfully
The Straight Line Eng. Co

JVH

1883-11-09.

OFFICE OF

Edison Machine Works,

104 Goerck Street,

New York, Nov. 9th 1883

Thomas A Edison Esq.
65 Fifth Ave –

Dear Sir.

Enclosed please find formulas filled except data for load & sp. which I will be able to give to morrow. The sizes of the Machines given are net. I have two draughtsmen engaged and at work.

Respectfully
Yours
G. Luther

1883 11-10

J. S. Sweet, Prest.,
H. F. Stephens, Sec.,
A. A. Sweet, Treas.,

The Straight Line Engine Co.,

Cor. Geddes and Fayette Streets.

Syracuse, N. Y. 18th Nov 1883

Thomas A. Edison - N.Y.

Dear Sir:

We were not able to settle definitely last Wednesday as to royalties upon which you could build our engines, owing to the fact that it is necessary to arrange with the parties who have an exclusive license for the northwest for three years from July 1/83 -

So far as this Company can control the directors are willing to fix the royalties at about 33% per square inch of piston area. That is for a cylinder of six inch bore $5.00 seven inch $20 - eight inch $25 - nine inch $30 - ten inch $40 - eleven inch - $50 - twelve inch - $60 -

Payment to be made every six months on all engines put in use. We believe we can arrange for the same terms for the territory held by the Ill. C. Bullock Mfg. Co - Our present agreement with them gives them all west of Lake Michigan north of the Ohio, and west of the Mississippi.

We will furnish a set of blue prints - of each engine you may require, that we have drawings for - at $100 - per engine - and make such drawings as you may wish us to make at the cost

The Straight Line Engine Company. 1883-11-10
~~November~~ ?

To Thos. A. Edison - 2

Bench work - We will furnish castings from our patterns if you should require any while starting your work - at 3½¢ per pound - & O.B. cars here also castings from any special tools we may have that you require at 4¢ per pound. Any parties whom you may send here will have every opportunity to inspect our tools and methods and every suggestion our experience dictates will be gladly given - No restrictions will be imposed in regard to bench changes - if any - as may need to fit the engines to your purpose except they must - so far as design is concerned be subject to the approval of our Mr Leech. By design we mean that which relates to the tools of the engine -

As soon as we can get a reply from Chicago we will advise you as to what can be done with the western territory. We can furnish drawings and castings for two or three sizes quite promptly -

Very truly
The Straight Line Eng. Co

1883-11-15.

J. S. Sweet, Prest.,
H. F. Stephens, Sec.,
A. A. Sweet, Treas.,

The Straight Line Engine Co.,

Cor. Geddes and Fayette Streets.

Syracuse, N. Y. Nov 15 1883

Thomas A. Edison M.E.
65 Fifth Ave New York.

Dear Sir;

Yesterday P.M. we received an answer from the M.C. Bullock Manf'g Co of Chicago to our inquiry to them, and we immediatly telegraphed to you to know if you could meet our Mr Smith to-day, not receiving a reply he did not go to N.Y. and so we write to say that for all territory under our controll we will licence your Co to build the Straight Line Engine on the terms mentioned in our letter of the 10th inst, and for all engines sold in the balance of the territory in the United States, that is in the territory held by the M.C. Bullock Co of Chicago, your Co to pay 50 % more that is for a 6 inch $22.50, 7 inch $30.00, 8 inch $37.50, 9 inch $45.00, 10 inch $60.00, 11 inch $75.00, 12 inch $90.00.

Should this proposition be in the main acceptable to your Co, and there be any minor points which you desire to talk over Mr Smith will come to New York, or see you when

The Straight Line Engine Company. 1883-11-15

To Thomas A. Edison 2

It is time which will be in a week or two at latest.

An early reply as to the probable consummation of an agreement will greatly oblige.

Yours Truly
The Straight Line Engine Co

P.S. Mr Smart will be in New York on the 22nd inst.

1883-11-22.

OFFICE OF

Edison Machine Works,

104 Goerck Street,

New York, Nov. 22d 1883.

Thomas A. Edison Esq.

Dear Sir

In regard of Mr. Geo. H. Bliss complaints about defective armatures L No 119a and K. No 105a I state, that in L. No 119a we found a piece of a knife blade sticking between two commutator bars, which certainly has not been done here. L. No 119a has never been repaired here and must have gone long before my time. There is no record of it. K No 105a was shipped Aug. 21st 1883 by Ernest, before I took charge and was declared O.K. by Mr. Bliss. We find the commutator bars loose and have to rewind the armature.

Yours Respectfully

C. Sedg

J. S. Sweet, Prest.
H. F. Stephens, Sec.
A. A. Sweet, Treas.

The Straight Line Engine Co.,

Cor. Geddes and Fayette Streets.

1883-11-26

Syracuse, N. Y. Nov. 26 1883

Thomas A. Edison Esq.
65 Fifth Avenue, New York

Dear Sir,

We have not received the letter looked for in regard to the acceptance of our offer regarding building our engines, and giving order for drawings and patterns for 10 X 12. We have however accepted the order to be bonafide and have started the drawings. Have you a Draughtman that you can spare and one that you would like to have, familiarize himself with the innards of the engine. If so send him at once. We cannot get the iron from Chicago under two weeks and expect to have the Pattern makers at work before that time. Mr. Sweet did not go to your Works on Friday in accordance with agreement, as your Private Secretary said you were not to be there. It will probably be better for us to make one set of castings here, and see if the patterns are correct, and also to finish the wheels, shafts, and governor, as we have special tools and experience in adjusting, that will save time.

Ok send formal order & we shall have to depend on drawings for patterns

Very Respectfully,
The Straight Line Engine Co.

1883-11-30 Form H.

THOMAS A. EDISON,
Central Station, Construction Dep't.,
No. 65 FIFTH AVENUE,

New York, Nov 30th 1883

Received from Thomas. E. Edison One Thousand Dollars for settlement of claim of Charles E. Rocap, & fus.

John E. Lambrecht

Dec 8th 1883

Received from Thomas. A. Edison One hundred dollars in full payment of services in the matter of the claim of Charles. E. Rocap.

John E. Lambrecht

Paid Charles. E. Rocap in full settlement of claim One hundred Dollars.
Dec 8th 1883

John E. Lambrecht

1883-12-06

J. S. Sweet, Prest.
H. F. Stephens, Sec.
A. A. Sweet, Treas.

The Straight Line Engine Co.,

Cor. Geddes and Fayette Streets.

Syracuse, N. Y. Dec 6 1883

RECEIVED
DEC 10 1883
ANSWERED
Dec 15 1883
FILE No.

Thomas A. Edison Esq.
65 Fifth Ave. New York

Dear Sir:-

Your letter of yesterday at hand. We have already got the drawings so far advanced on the 10 X 12 engine as to have three pattern-makers at work, and will be glad if you will send on one of your pattern-makers, in whom you have confidence, as his experience engrafted on our own, will be useful to you in the future.

We have room to work one more and have not been able to find another here.

Very Truly,
The Straight Line Eng. Co.

Ask Saldan if he has got his pattern maker & what he thinks of complying with this request

E

1883-12-12

Established 1855.

The George Place Machinery Company,

Railway and Machine Shop Equipment,

121 Chambers & 103 Reade Streets,

P.O. Box 1119. New York, Dec 12th 1883

Mr T A Edison

Dear Sir

When you talked with me on the Steamer asking whether I knew of anybody capable of taking charge of your French Co. Job, I overlooked one man who I think would be of very good service to you in that capacity. He has had large experience in building various lines of Machinery especially on Machinists Tools & he is now head foreman in a Tool building Shop. I know he is a thorough Mechanic & a practical & I think he is fairly well up on ~~other~~ Steam matters which would be an advantage when you build your own Steam Engine.

I think he is now getting

1884-01-22

Established 1855.

The George Place Machinery Company,

Railway and Machine Shop Equipment,

121 Chambers & 103 Reade Streets,

P. O. Box 1119. New York, _____ 188__

about $1800 per annum & also think he could be induced to leave his present place at some advance on that say $2200 to $2500.

I have known him for a long time & am positive that as soon as he became familiar with your work which would be in a exceedingly short space of time he would show very good results.

If you desire it I will arrange an interview with you at one days notice.

Please reply by return & oblige

Yours truly.

H. McLean

I do not think it would be necessary to

make any time contract with him or that is can (which I do not think probable) you or he could not agree you would not be bound in any contract.

The party in question is not aware of my writing you this letter or in fact anything about your writing anybody.

Please reply early & oblige

Yours H.M.L.

1883-12-22

EDISON MACHINE WORKS,
104 Goerck Street,

New York, ... 188

$650 Insure per dynamo

Shipped Dec 22/82
To Edison Indian & Colonial Co. Lim.
#6 Lombard St.
London E. C.
Eng.

5 "Z" Dynamos #311, 317, 324, 328 & 332 — 60 Extra brushes

Box #1	Contained	Cores Field & Keeper	of Z #324 —	weight	2120	lbs
" 2	"	Bed Plate	" " " —	"	600	"
" 3	"	Armature	" " " —	"	325	"
" 4	"	Switchboard	" " " —	"	40	"
" 5	"	Cores Field & Keeper	" #317	"	2120	"
" 6	"	Bed Plate	" " "	"	600	"
" 7	"	Armature	" " "	"	325	"
" 8	"	Switchboard	" " "	"	40	"
" 9	"	Cores Field & Keeper	" 332	"	2120	"
" 10	"	Bed Plate	" "	"	600	"
" 11	"	Armature	" "	"	325	"
" 12	"	Switchboard	" "	"	40	"
" 13	"	Cores Field & Keeper	" 328	"	2120	"
" 14	"	Bed Plate	" "	"	600	"
" 15	"	Armature ~~Switchboard~~	" "	"	325	"
" 16	"	Switchboard	" "	"	40	"
" 17	"	Cores Field & Keeper	" 311	"	2120	"
" 18	"	Bed Plate	" "	"	600	"
" 19	"	Armature	" "	"	325	"
" 20	"	Switchboard	" "	"	40	"
			Total Weight		15425	lb.

E mc Wks (1883)

Dear Ockap

When will you have the new Brushes ready for trial

Edison

I am having a little trouble with the die for ~~punching~~ punching the holes in the mica, but will probably have enough mica strips to make a couple of brushes to morrow and am in the hopes of trying them then. I enclose a few samples of the mica. I am putting the German silver Commutator on the same armature, so I will try it with the new brushes.

~~Work on screw~~

Every bit of finished work that is ready for assembling must come to Stock Room & no work to be given assemblers from any dept except Stock Room —

All work up to the finishing point & which is ready to be sent to Stock Room must pass through the inspecting dept.

All parts after inspection are to ~~be~~ be correlated & finished ready for inspection for stock room ~~&~~ by general foreman

Raw Stock Room must keep stock raw material ahead of work.

(1e) Keep up his Raw Stock. Make all drafts for raw stock good immediately

(Edwin)

[MEMORANDUM BY SAMUEL INSULL]

1883

THOMAS A. EDISON,
No. 65 FIFTH AVENUE,

NEW YORK, _____ 188

Edison Machine Works

Nothing on everything up to $100,000
3% between $100,000 & $150,000
4% " $150,000 & $200,000
5% " $200,000 & $250,000
6% everything above

Edison Machine Works

Original Capital			164.111.03	
Balance Profit & Loss Dec. 31			42.229.67	
Total Cash Investment			206340.70	
Investment in plant, machinery, Tools, stock supplies, labor and material	18626	07		
Other Investments	10,168	66		
Balance a/c. Receivable over a/c Payable	8,976	69		
	206,771	42		
Cash overdraft	430	72	206,340	70
Sales 1883	176,800	00		
Net Profits	12,236	00		
Cost of Experiments	18,450	00		
Total Profits if Light Co had paid Experiments			30,686	00

Form H.

THOMAS A. EDISON,
Central Station, Construction Dep't.,
No. 65 FIFTH AVENUE,

New York, ... 188

Disc Dynamo -
Extracts from Watts Daily Reports

Feb 21/81 - Dynamo at work on disc commutator
Feb 22/81 - Counter balance discs placed in position -
Mch 5/81. Bars, brush and discs finished & commutator discs nearly in 2nd dynamo
Mch 8/81 Logan ordered iron bar for large Dynamo - with Logan letter of that date.
" " new brushes for large Dynamo -
Mch 9/81 working on large Dynamo (Logan letter)
Mch 9/81 Operator of copper discs ordered -
Mch 11/81 working on armature for large Dynamo - (Logan letter)
Mch 12/81 ditto, ditto, -
Mch 22/81. Logan writes of the completed first copper discs for large Dynamo and finish machine

[MEMORANDUM BY CHARLES BATCHELOR]

Money for Machine Works

I proposed the Light Co loan the Machine Works $100.000 — M W. puts up $200,000 stock and gives the Light Co option at end of year to take $100.000 of it at par

Osler says ~~his~~ that the following arrangement can probably be made

Light Co sells $25.000 of its stock at $225 provided buyer will loan also $50.000 for 1 year at 6%

Light Co loans M.W. $100000 + M W gives as security

(1883)

Dynamos

Capacity 16 C.P. Nominal		Capacity actual maximum 16 C.P.	Capacity actual min 10 C.P.	Revolution per Min	Pulleys Dia	Pulleys Face	Volts	Amperes	Price	Dimensions Length	Width	Height
25		30	47	1460	5¼	3½	110	23	175.			
50		64	98	1600	6	5	109	48	250.			
100		124	190	1500	7¼	6¾	111	93	400.	4'	2'6"	4'10"
200		240	367	1300	12	9	110	180	725.	5'6"	2'6"	
300		372	567	1120	12	10½	112	278	1075.	5'6"	3'3"	
400		543	828	1100	14	12½	110	406	1500.	6'6"	3'	6'

175

(1883)

G or 25 light Dynamo (3 Boxes)

		Gro	Tare	nett
1 Box containing	Cores Keepers & Fields	850 lbs	107 lbs	743 lbs
1 " "	Bed Plate ect	335 "	80 "	255 "
1 " "	Armature	102 "	27 "	75 "
	Totals	1287 "	214 "	1073 "

R or 50 light Dynamo (3 Boxes)

		Gro	Tare	nett
1 Box containing	Cores Keepers & Fields	927 lbs	107 lbs	820 lbs
1 " "	Bed Plate ect	372 "	80 "	292 "
1 " "	Armature	102 "	27 "	75 "
	Totals	1401 "	214 "	1187 "

H or 400 light Dynamo (8 Boxes - 9 Cartg's)

		Gro	Tare	nett
6 Boxes containing	Cores	2214 lbs	360 lbs	1854 lbs
1 " "	Sundries	125 "	100 "	25 "
1 " "	Armature	1105 "	315 "	790 "
3 Keepers	(Unboxed)	1077 "		1077 "
1 Bed Plate Finished	(")	2905 "		2905 "
2 Pillow Blocks & Sh's	(")	192 "		192 "
3 Rails	"	156 "		156 "
	Totals	7774 "	775 "	6999 "

over

"T" (100 lights) Dynamo (4 Boxes, 1 crate)

		Gro	Tare	Nett
2 Boxes containing	cores & shipper	540 lbs	134 lbs	406 lbs
1 " "	Sundries	285 "	80 "	205 "
1 " "	armature	265 "	46 "	219 "
1 Bed & Late & Field	(unboxed)	815 "		815 "
	Totals -	1905 "	260 "	1645 "

1883. Electric Light - Electric Tube Company (D-83-035)

This folder contains correspondence and other documents relating to the business of the Electric Tube Company in New York City, which manufactured underground conductors for the Edison electric light system. Much of the correspondence is by John Kruesi, treasurer of the company.

Approximately 60 percent of the documents have been filmed. The following categories of documents have not been filmed: accounts; orders; bills and receipts; duplicate copies of selected documents.

1883-01-02

The Electric Tube Company.

Dr.								Cr.							
Bills Receivable	1	6	4	8	4	6	7	Bills Payable	1	3	1	3	6	4	4
Cash		6	1	1	0	3	2	Capital	2	5	0	0	0	0	0
Tools & Appliances		7	6	9	1	8	8	Net Gain	2	4	7	0	3	7	7
Furniture & Fixtures			4	0	0	0	0								
Stock (taken at cost price)	3	2	1	5	3	3	4								
$	6	2	8	4	0	2	1	$	6	2	8	4	0	2	1

New York January 2nd 1883.

We allow 45% on Tools & Appliances.
The Bills Receivable are from: Thomas A. Edison
The Edison Electric Illuminating Co
The Edison Electric Light Co.
The Edison Company for Isolated Lighting
The Edison Lamp Co
The Edison Machine Works
The Western Edison Co
The Electrical Supply Co
Post & Company
J. W. Ward
Bergmann & Co
Barr & Houston

THE ELECTRIC TUBE CO.

J. Kruesi TREASURER.

22 1883-01-12

The Electric Tube Company,

65 Washington St.

T. A. EDISON Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, January 12 1883.

Thomas A. Edison Esq
65 Fifth Avenue City
New York

The drawing plates & dies he partly from Providence made did not work at all & new ones must be made & it will probably be possible to try again towards the middle of next week. I will try them with it to wire, so that if it works we can at once certifiy Mr E.H. Johnson for Mr Wright's plant.

Yours truly,

THE ELECTRIC TUBE CO.

John Kruesi TREASURER.

Johnson.

34 1883-01-16

The Electric Tube Company,

65 Washington St.

T. A. EDISON. Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL. Sec'y.

Tube Co

New York, Jan. 16th 1883

My Dear Insull

The Electric Tube Co is hard up please send a Check as soon as possible & oblige

Yours truly

J Kruesi

Treas.

22 1883-02-06

The Electric Tube Company,
65 Washington St. Kruesi

T. A. EDISON Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, Feby 6th 1883.

Mr Edison
65 Fifth Avenue
City

Dear Sir,

Our landlord, put up the rent $100 last year & for the coming year he wants to put it up $100 again. What are the prospects for the 28th District or any other Dist we have to agree to the increase? Answer only yes, or no, but soon.

Yours truly
John Kruesi

22 1883-02-10

The Electric Tube Company,
65 Washington St. Kruesi

T. A. EDISON Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, February 10th 1883.

Samuel Insull Esq
65 Fifth Avenue City

Dear Sir

Please let Mr Edison sign the enclosed lease & return as soon as possible.

Yours truly,
THE ELECTRIC TUBE CO.
John Kruesi TREASURER.
Encl.

34 1883-02-12

Ans 15th Kruesi

The Electric Tube Company,

65 Washington St.

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, February 12th 1883.

Samuel Insull Esq
65 Fifth Avenue City

Dear Sir

We are in great need of funds. Please send us a check, as large a one as possible. Please let me know whether the insurance & everything furnishing to the Genoa Establishment was satisfactory & oblige

Yours truly

THE ELECTRIC TUBE CO.

John Kruesi TREASURER.

34 1883-02-15

The Electric Tube Company,

65 Washington St.

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, Feby 15th 1883

Samuel Insull Esq
65 Fifth Avenue City

Dear Sir,

Enclosed please find 2 checks, one for Ammonia Brass & Copper Co & one blank please get Mr Edison to counter-sign them.

Please let me know by telegram, when I can see Edison I have something very important to tell him about the 3 & 4 wire system

Yours truly

John Kruesi Jr.

29 1883-03-02.

The Electric Tube Company,

65 Washington St.

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, March 2nd 1883

Samuel Insull Esq.
65 Fifth Ave.
City.

Dear Sir,

Your favor of the 1st received and contents noted. In reply would say, we will in future, do as you requested that is to mark in Batchelor's goods, C. B. 1. 2. etc, and also in bill. will give you contents of each case.

Yours Truly
F.

3/27/83

Thomas A. Edison Esq

Dear Sir,

Your favor of the 26th inst. is at hand. Your Foreign Order # 154 will receive our prompt attention

Yours truly THE ELECTRIC TUBE CO

32

1883-03-02

33

The Electric Tube Company,

65 Washington St.

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, 32nd 1883

Samuel Insull Esq
65 Fifth Avenue N.Y. City

Dear Sir,

We have ordered all the material for the last Milan order (# 154) & will get it ready for shipment as soon as possible. But we wish to be sure that we can get the money as soon as we can show bills of lading, insurance &c

Yours truly
John Kruesi

Please let us hear from you within a few days

4/11/83

Dear Sir

Your foreign order #156 has been received & we shall give same our prompt attention

Yours truly

THE ELECTRO TUBE CO.

Schmidt

.32 1883-04-14

The Electric Tube Company,

65 Washington St.

T. A EDISON. Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, 4/14th 1883.

Samuel Insull Esq
65 Fifth Avenue N.Y. City

Dear Sir,

We quote for line of electric tubes for 250 a lamps, 1000 feet with 13% loss as follows:

#3 tube 1000 feet	960.00
52 boxes with clamps complete	127.40
52 pair of joints	41.60
260 lbs compound	26.00
	$1155.00

#4 tubes with a loss of 17%

#4 Tubes 1000 ft	700.00
52 boxes with clamps complete	127.40
52 pair of joints	41.60
260 lbs compound	26.00
	$895.00

Net F.O.B

(1883)

S. Insull #2

The Electric Tube Company,

65 Washington St.

T. A EDISON. Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, 188

Please let Mr Edison choose the Pucentage loss.

Yours truly

THE ELECTRIC TUBE CO

John Kruesi TREASURER.

Jch.

Form No. 3.

1883-04-16

CABLE MESSAGE

THE WESTERN UNION TELEGRAPH COMPANY.

All CABLE MESSAGES received for transmission must be written on the Message Blanks provided by this Company for that purpose, under and subject to the conditions printed thereon, and on the back hereof, which conditions have been agreed to by the sender of the following message.

THOS. T. ECKERT, General Manager. JORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	OFFICE
275	HW	9	208

Received at 791 BROADWAY

Dated Milan Apl 10 1883

To Edison Tube Company NY
65 Fifth Ave

Cable if Tubes shipped

Bookkeeper

Colombo

34 1883-04-17

The Electric Tube Company,

65 Washington St.

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, 4/17th 1883.

Samuel Insull Esq
65 Fifth Avenue City.

Dear Sir,

In answer to yours of the 14th inst, in regard to difference in case 64 of the Italian or Ital. say we find we made the error complained by the Italian Co. & herewith send you a credit memorandum for the difference. The error was made by concluding that the 3" outside diam tubes in this case were old style #1 1/2 whereas they were new style number twos & should have been charged at $2.57 per foot, instead of $2.325/100.

Yours truly

Pennie

Form No. 1.

New York, April 20 1883

The Electric Tube Co.,

65 Washington Street.

~~Order No.~~ 1883-04-20.

For Price List

~~Through~~

	PIECES.	1	1½	2	2½	2¾ Street.	2¾ House.	3 Street.	3 House.	4 Street.	4 House.	5	6	7	REMARKS.
BOXES.	Coupling	3.15	3.15	2.90	2.80	2.80	...	2.30	...	2.30	...	...	...	...	
	Elbow	3.22	3.22	2.94	2.80	2.80	1.12	2.42	.94	2.42	.94	.62	.62	.60	
	Tee	4.10	4.10	...	...	...	...	2.65	1.10	2.65	1.10	1.10	1.10	1.00	
	Service	...	...	...	...	4.00	...	2.55	...	2.55	...	...	...	...	
	Wire Branch	...	...	...	...	...	1.41	...	1.01	...	1.01	...	...	...	
	Cross	...	...	...	...	...	...	...	1.50	...	1.50	1.45	1.45	1.45	
	House Coupling					...		...	.45	...	.45	.62	.62	.58	
	45° Elbows	4.20	4.20	4.00	3.10	3.10	...	2.80	1.25	2.80	...	...	...	.90	
JOINTS.	Expansion Coupling	4.55	3.22	2.24	1.85	1.50	...	1.00	...	.90	...	...	...	...	
	Straight "	1.65	1.45	1.30	1.10	...	1.00	...	.60	...	.50	.46	.40	.28	
	Rt. Hd. Reverse Coupl'g	...	...	...	...	...	.95	...	.65	...	.56	.48	.42	.32	
	Lft. Hd. " "	...	...	...	...	...	.95	...	.65	...	.56	.48	.42	.32	
	Upright Elbow	4.25	3.65	2.43	2.04	1.94	1.10	1.32	.65	.96	.55	.42	.38	.28	
	Flat "	4.30	3.45	2.50	2.00	1.45	.98	1.18	.60	.85	.53	.45	.40	.28	
	Reverse "	...	...	...	...	2.05	1.10	1.36	.40	1.05	.66	.55	.52	.50	
	Service	...	...	...	...	1.84	...	1.20	...	1.05	...	...	...	...	
	Tee	...	...	...	...	...	...	1.55	...	1.16	...	.90	.85	...	
	" (Branch No. 3)	...	...	...	...	...	...	1.55	...	1.16	...	.90	.85	...	
	" (" 4)	...	...	...	...	...	...	1.55	...	1.16	...	.90	.85	...	
	" (" 5)	...	...	...	...	...	...	1.55	...	1.16	...	.90	.85	...	
	" (" 6)	...	...	...	...	...	...	1.55	...	1.16	...	.90	.85	...	
	" (" 7)	...	...	...	...	...	...	1.55	...	1.16	...	.90	.85	...	
	Wire Branch					...		...	.80	...	.45	.59	.52	.50	
	Wire Socket					...		...	.47	...	.44	.37	.35	.32	
	Wire Clamp		1.45	1.24	1.05	...	.96	...	.45	...	.65	.56	.50	.46	
	45° Up Elbow		3.40	2.65	2.15	1.95	...	1.45							
	45° Flat "		3.40	2.45	2.10	1.90	...	1.45							
	Junction Box Elbow			1.40											
MISCEL. & CLAMPS.	Ball Clamps	.65	.65	.55	.50	.55	...	.44	...	.44	...	.40	.40	.40	
	Base Clamps	...	...	...	.55	.55	.55	.55	.55	.55	.55	.50	.50	.50	
	Pick Hole Covers														
	Caps	...	1.25	1.15	.95	.89	.89	.44	.44	.38	.35	.21	.21	.18	
	House Box Rings														
TUBES.	Tubes	4.43	3.55	2.54	2.00	1.54	...	1.00	...	.40	...	.44	.34	.25	
	Copper per foot	3.22	2.56	1.69	1.32	.94	...	.51	...	.35	...	.21	.13	.04	
	Wooden Plugs	.03½	.03½	.03	.03	.03	...	.03	...	.02	...	.02	.02	.02	
	Old style Tubes	4.10	3.25	2.35	1.85	1.45	...	.85							Red figures for old style tubes

TAPE.

12 inch	40¢	lbs.
1½ "	40¢	"
1 "	40¢	"
¾ "	40¢	"
½ "	40¢	"
⅜ "	60¢	

Plugs.	Iron.	Brass.
1 inch Pipe Plug	5¢	
½ " " "	4¢	
⅜ " " "	3 "	
¼ " " "	3 "	
Compound	10¢	lbs.

Bridge Boxes

Feeder Junction Boxes

Bridge and Junction Box Fittings, see List.

Millboards, see List. Tools, see List.

1883-04-30

The Electric Tube Company,

65 Washington St.

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, April 30th 1883.

Mr Thomas A. Edison
65 Fifth Avenue New York City.

Dear Sir,

The one first above are complete and finished like the one of the Lead St Station, and the 3 conductor system for $ 819.32 cts/100 viz:-

69500 feet of inside
21500 " " feeders
300 " stub services } $ 1,308.95
72 Junction boxes

Digging & paving at 12c per ft 8624.00

$ 8103.00

Lead Street Station finished cost without digging & paving $ 18000 cts/100, taking digging & paving at the same as above 9621 cts/100

$ 18962.21 cts/100 total cost.

Yours truly,

THE ELECTRIC TUBE CO.

John Kruesi TREASURER.

33 1883-05-16

The Electric Tube Company.

65 Washington St.

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, May 16th 1883.

Samuel Insull Esq
65 Fifth Avenue City.

Dear Sir,

Herewith find price list of tubes, boxes &c. As we have never made any tubes of the 3 wire system we can not at present give you a price on them.

Yours truly

THE ELECTRIC TUBE CO.

Schmidt.

1883-05-25

RECEIVED MAY 28 1883 ANSWERED

The Electric Tube Company

65 Washington St.

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, June 1st 1883.

Thomas A. Edison Esq
65 Fifth Avenue City

Dear Sir,

See the estimate for Charleston S. C. our Mr Langton did not know at the time if it was paved.

I learned from Dr Moses to-day that it has just been paved with elaborate pavement, this will consequently increase the item "Excavation" $630.00 making it $1350.00/100.

In the estimate sent May 21st the freight is not included this will have to be paid in Charleston we delivering f.o.b. New York.

Yours truly THE ELECTRIC TUBE CO. John Kruesi Pres

1883-05-26

The Electric Tube Company.

RECEIVED MAY 23 1883 ANSWERED

65 Washington St.

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

May 24 1883

FILE NO.

New York, May 26th 1883.

Thomas A. Edison Esq
65 Fifth Avenue City
Dear Sir.

We herewith notify you, that on all contracts not signed up to date: We sign with the understanding, that we only deliver material F.O.B. New York City. The local company paying the freight + cartage from freight-depot to place of storage on material at the destination.

Yours truly
THE ELECTRIC TUBE CO.
John Kruesi TREASURER.
pb.

1883-05-26

The Electric Tube Company.

RECEIVED MAY 28 1883 ANSWERED

65 Washington St.

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

May 26 1883

FILE NO.

New York, May 26th 1883

Samuel Insull Esq
65 Fifth Avenue City
Dear Sir,

One thing I omit to write in Mr Clarke's letter from Lawrence, that is that our figures exclude the freight. We only delivering f.o.b. New York; freight as well as cartage from freight depot to the place of storage is not to be paid by us.

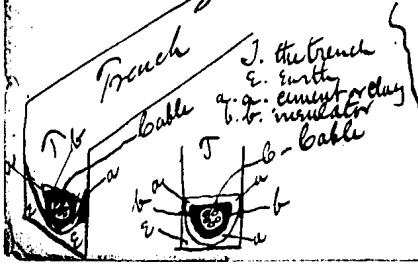
Yours truly
THE ELECTRIC TUBE CO.
John Kruesi TREASURER.
pb.

[INCOMPLETE]

[redacted] 1883-05-28.
2

At the bottom of a trench, dug in the street, place clay or sand & water cement fashioned by the trowel like a continuous trough of 2 or more inches in diameter. In this trough, when the cement is set or dry, place the tied up bundles of wires (or cable) and over these wires, lying at the bottom of the clay or cement trough, pour melted rosin, tar, pitch, asphaltum, parrafine lead or other insulator. When this insulating material has permeated or saturated the bundle of wires, filled the trough, and become cold or hardened, cover the trough & contained wires with a cap or a layer of clay or cement and when hardened cover the whole with earth and fill the trench. In order to render insulation perfect the tied bundles of wires may be soaked in or run through a vat of insulating material before placing in the trough and then covered with more melted material to fill all the interstices. A trough of wood or metal V shaped with a cap of wood stone or metal may be used instead of the cheaper cement. Two bricks set V shape with a third brick as a cap or four bricks ▭ placed lengthwise edge to edge - lined and jointed with cement - before coating with insulating material. Openings can be left at intervals & masked for the insertion of lateral wires and connections.

(Pardon the poor diagram



Yours truly

M. C. Spaulding

1883-06-08

The Electric Tube Company,

65 Washington St.

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, June 8th 1883

Order No. 108 B.

Please furnish this company with as soon as possible

276 rods of electric copper .3" in diameter (three tenths inch)

216 rods of electric copper .259" in diam. (two hundred & fifty nine thousandth)

1200 rods of electric copper .238" in diam (two hundred & thirty eight thousandth)

600 rods of electric copper .203" in diam (two hundred & three thousandth)

All of these rods must be in straight lengths of 20'4" (twenty feet four inches) each

To be shipped in cases & delivered free at 65 Washington St.

Give Date and Number of Order on Invoice.

John Kruesi Treas.

per

To Thomas A. Edison,

1883-06-13

The Electric Tube Company,

65 Washington St.

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, June 13th 1883.

Thomas A. Edison Esq
65 Fifth Avenue City.

Dear Sir,

Will you please send word to Frank Sherrard to come on as soon as possible. I will make salary satisfactory to him but must have him soon.

Truly yours
John Kruesi
pb.

The

T. A. EDISON, Pres.
JOHN KRUESI, T.

June 15th. 1883

John Kruesi, Esq. Treasurer,

Edison Tube Co.

65 Washington Street, City.

Dear Sir:-

Can you give me any idea as to when the Brockton tubes will be ready to lay. The work, in connection with our station there, is going along rapidly and will, I think, be finished inside of 15 or 20 days. I think you should do all you possibly can to hurry up the Ansonia people with their copper. They write me under yesterday's date that they do not know exactly when they will have it ready for you.

Very truly yours,

1883-06-18

ne Electric Tube Company,

65 Washington St.

New York, June 18th 1883.

Samuel Insull Esq
65 Fifth Avenue City

Dear Sir,

I will as already stated do my very best to push the Brockton job.

Your favor in regard to the box notice has been received but the notice was not enclosed: Please send it to me at your earliest convenience

Yours truly
John Kruesi
Pr.

24.

1883-06-16

The Electric Tube Company,

65 Washington St.

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, June 16th 1883

Samuel Insull Esq
65 Fifth Avenue City

Dear Sir,

In reply to your favor of the 15th inst:- I will do all I can to have the order out. I will urge the people who supply our material all I can.

As to the time, when we will have the goods completed, I can give you no answer until I hear from the parties who supply the material

Truly yours

John Kruesi
pl

1883-06-18

The Electric Tube Company,

65 Washington St.

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, June 18th 1883

Samuel Insull Esq
65 Fifth Avenue City

Dear Sir,

Please send me the bay notice & I will go over it & see to it.

Yours truly
John Kruesi
pl

We recd no check on Saturday & are consequently all out of funds, please send the promised check down as early as possible.

pl

1883-

June 19th 1

John Krusi, Esq.

Washington Street, City.

Dear Sir:-

I am in receipt of your favor of yesterday's date, and will attend to getting you money from the Illuminating Co. to-morrow. I am going to Philadelphia this morning, and have not the time to look into it.

Very truly yours,

1883-06-18

The Electric Tube Company,

65 Washington St.

...DISON Pres.
...KRUESI, Treas.
...UEL INSULL, Sec'y.

New York, June 18th 1883.

Samuel Insull Esq
65 Fifth Avenue City

Dear Sir,

The Ansonia Brass & Copper Company are asking for a check of 3300.00 which we owe them for copper received some months ago for the Illuminating Co.
The Edison Electric Ill. Co now owes us $1145.25 50/100. Will you please see that they cause at least enough to give us a check to pay the Ansonia.
I do not like to trouble you, but as you have undertaken to do this work I am obliged to.

Yours truly,

John Kruesi

June 20th, 1883 8

John Truesi, Esq.

65 Washington Street, City.

Dear Sir:-

I have not yet heard from Mr. Clarke in relation to Lawrence. I wrote him about the matter on Saturday and am expecting daily to receive from him a signed contract. When it arrives I will advise you.

Very truly yours,

1883-06-20

The Electric Tube Company,

65 Washington St.

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, June 20th 1883

Samuel Insull Esq
65 Fifth Avenue City
Dear Sir,
Has the contract for Lawrence Mass. been signed. Is it all right to order the material.
Yours truly
John Kruesi
Johnsy

The Electric Tube Company.

65 Washington St.

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, June 20th 1888.

Samuel Insull Esq
65 Fifth Avenue City

Dear Sir,

It would be wasting time to estimate on the last determination you sent me of Governor's Bdg. Enclosed piece of wire is the size of one of the flexes which is 25½ feet long & the largest future unit of fire is only equal to 4 of these small wires (with neutral) Mr Sprague is making a determination now, which when finished will give us conclusive basis to work upon, as to the carrying capacity of the conductors. Truly yours, John Kruesi
Treas.

1883-06-22

The Electric Tube Company,
65 Washington St.

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, June 22nd 1883

Order No. 116 B.

Please furnish this company with, as soon as possible the following straight rods of electric copper.

210 rods	. 425 diam.	20 ft 4 in long		
255 "	. 410 "	20 " 4 "	"	
180 "	. 325 "	20 . 4 "	"	
132 "	. 284 "	20 . 4 "	"	
1170 "	. 220 "	20 . 4 "	"	
405 "	. 203 "	20 . 4 "	"	

The rods to be marked as explained to the Ansonia people for the previous order.

To Thomas A. Edison Esq.
65 Fifth Avenue City

Order No. 657
Ansonia Brass Co
June 26/83

Give Date and Number of Order on Invoice.

John Kruesi Treas.

per John

1883-06-27

The Electric Tube Company,
65 Washington St.

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, June 27th 1883

Order No. 120 B.

Please furnish this company with

Please cancel our order #116 B for copper rods & substitute the below for it.

264 rods	. 410 mil diam		
300 "	.425 "	"	
504 "	.340 "	"	
1008 "	.220 "	"	

each rod to be 20 ft 4 inches long to be delivered in straight rods & marked as explained to the Ansonia Brass & Copper Co for previous orders

To Thos A. Edison
65 Fifth Avenue City

Order #69 June 27/83

Give Date and Number of Order on Invoice.

John Kruesi Treas.

per John

1883-07-05

The Electric Tube Company,

65 Washington St.

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, July 5th 1883

File

Account if stock on hand.

3 # 1½ (3¼")	20½ ft	=	61½ ft.	1 # 3 (2")	19 5/12	=	19 5/12
13 # 2 (3")	"	=	246 "	1 # 3 (")	19 7/48	=	19 7/48
3 # 2 (2¾")	"	=	61½ "	1 # 3 (")	19 9/24	=	19 9/24
2 # 2½ (3¾")	"	=	41 "	1 # 3 (")	19 17/48	=	19 17/48
3 # 2½ (2½")	"	=	61½ "	1 # 3 (")	19 1/3	=	19 1/3
11 # 2¾ (2½")	"	=	225½ "	1 # 3 (")	19 7/24	=	19 7/24
29 # 2¾ (2¼")	"	=	594½ "	1 # 3 (")	19 5/24	=	19 5/24
5 # 3 (2¼")	20 9/24 "	=	101 21/24 "	1 # 3 (")	18 17/24	=	18 17/24
6 # 4	20 9/24 "	=	122 7/24 "	2 # 3 (")	18 13/24	=	37 1/12
28 # 4	15 "	=	420 "	1 # 3 (")	18 21/48	=	18 21/48
15 # 5	20 9/24 "	=	305 15/24 "	1 # 3 (")	18 9/24	=	18 9/24
36 # 5	15 "	=	540 "	1 # 3 (")	18 7/24	=	18 7/24
65 # 6	20 9/24 "	=	1324 9/24 "	1 # 3 (")	18 1/6	=	18 1/6
50 # 6	18½ "	=	925 "	1 # 3 (")	18 3/24	=	18 3/24
70 # 6	15 "	=	1050 "	1 # 3 (")	18 1/24	=	18 1/24
72 # 7	20 9/24 "	=	1467 "	1 # 3 (")	17 1/2	=	17 1/2
47 # 7	15 "	=	705 "	1 # 3 (")	17 1/12	=	17 1/12
all 2" tubes				1 # 3 (")	16 1/4	=	16 1/4
1 # 3	20 1/6 ft	=	20 1/6 ft	2 # 3 (")	16 1/12	=	32 1/6
1 # 3	19 13/24 "	=	19 13/24 "	1 # 3 (")	15 5/6	=	15 5/6
1 # 3	19½ "	=	19½ "	1 # 3 (")	12 23/24	=	12 23/24
1 # 3	19½ "	=	19½ "	1 # 3 (")	15 5/12	=	15 5/12
3 # 3	19 11/24 "	=	58 9/24 "	2 # 3 (2")	15 9/24	=	30 3/4
2 # 3	19 21/48 "	=	38 21/24 "	1 # 3 (2")	15 1/3	=	15 1/3
			17 5 23/24				47 3 43/48

1883-07-05

Sheet #2.

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

The Electric Tube Company,

65 Washington St.

New York, ... 188

1 #3 (2")	14 17/24 ft	1 #3 (2")	11 1/3 ft
1 #3 "	14 17/24 "	1 #3 "	11 19/48 "
1 #3 "	14 17/48 "	1 #3 "	12 1/3 "
1 #3 "	14 1/3 "	1 #3 "	10 5/24 "
1 #3 "	14 13/48 "	1 #3 "	10 1/12 "
1 #3 "	14 1/12 "	1 #3 "	12 1/12 "
1 #3 "	14 "	1 #3 "	10 3/48 "
1 #3 "	13 5/6 "	1 #3 "	12 21/48 "
1 #3 "	13 19/24 "	1 #3 "	12 1/24 "
1 #3 "	13 15/24 "	1 #3 "	10 13/48 "
1 #3 "	13 1/24 "	1 #3 "	11 15/48 "
1 #3 "	11 1/24 "	1 #3 "	11 1/3 "
1 #3 "	11 1/6 "	1 #3 "	12 1/3
1 #3 "	11 3/24 "	1 #3 "	11 5/24
	188 1/12		159 1/48

Total 188 1/12
159 1/48
175 23/24
473 43/48
996 23/24 feet.

1883-07-05

The Electric Tube Company.

65 Fifth Avenue.

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, July 5th 1883

Price List of Electric Tubes
(3 conductor system) F. O. B. including packing

Nominal Size	Circular Mills	Diameter of Copper	Price per Ft. Plain including boxes & joints	Price per Ft with Galvanom wires incl. boxes & joints	Gr Weight Per ft	Laying
500	500.000	.707	$2.15	$2.18	10.9 lbs	6¢
450	450.000	.671	2.01	2.04	10.4 "	6¢
400	400 000	.633	1.85	1.88	10. "	6¢
350	350 000	.592	1.68	1.71	9.6 "	6¢
300	300 000	.548	1.53	1.56	9.2 "	6¢
250	250 000	.500	1.26	1.29	7.2 "	6¢
206	206 116	.454	1.12	1.15	6.9 "	6¢
180	180 625	.425	1.04	1.07	6.7 "	6¢
167	167805	.410	1.01	1.04	6.6 "	6¢
144	144400	.380	.86	.89	5.3 "	6¢
133	133079	.365	.83	.86	5.2 "	6¢
115	115600	.340	.77	.80	5.1 "	6¢
105	105534	.325	.71	.74	5.1 "	6¢
90	90000	.300	.68	.71	4.9 "	6¢
80	80656	.284	.64	.67	4.8 "	6¢
67	67081	.259	.61	.64	4.7 "	6¢
56	56644	.238	.53	.56	3.8 "	6¢
48	48400	.220	.49	.52	3.7 "	6¢
41	41209	.203	.47	.50	3.6 "	6¢
32	32400	.180	.40	.43	2.9 "	6¢
27	27225	.165	.38	.41	2.9 "	6¢

The Electric Tube Co J. Kruesi Pr

1883-07-18

The Electric Tube Company,

65 Washington St.

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, July 18th 1883.

Thomas A. Edison Esq
65 Fifth Avenue City

Dear Sir,

We will deliver 500 yds (1500) of electric tubing including boxes, joints, compound to carry 200 sixteen candle lights as follows:-

Cost of all tubing joints, boxes & compound
at 8% loss #23/4 tube $2950.00
at 15% " #3 " $1992.00

The above is f.o.b New York.

Yours truly

THE ELECTRIC TUBE CO

John Kruesi
Pres.

334,500

1883-07-23

The Electric Tube Company,

65 Washington St.

T. A. EDISON Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, July 23rd 1883

Thomas A. Edison Esq
65 Fifth Avenue City

Dear Sir,

We are in receipt of your foreign order #167. Have already orders waiting for some & shall complete it with out delay.

Yours truly

THE ELECTRIC TUBE CO.

1883-07-27.

The Electric Tube Company,

65 Washington St.

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, July 27th 1883

Thos. A. Edison Esq
65 Fifth Avenue City
Dear Sir,

Below find prices of our commercial sizes of 3 conductor tubes all complete ready for company's stock.

Wire Gauge	Circular mills.	Price for main	Price for feeder	Gr Weight per ft.	Remarks.
0000B	206116	$1.17	$1.20	lbs. 6.9	These prices are for
000,	180625	1.09	1.12	6.7	ordinary soft ground,
000A	167805	1.06	1.09	6.6	belgium block pave-
00B	144400	.92	.95	5.3	ment, 8¢ per foot
00A	133079	.89	.92	5.2	additional.
0B	115600	.83	.86	5.1	Nicholson pavement
0A	105534	.78	.81	5.1	15¢
1B	90000	.75	.78	4.9	Cobble stone pavement
2,	80656	.71	.74	4.8	6¢
3,	67081	.68	.71	4.7	Macadamized 6¢
4,	56644	.60	.63	3.8	
5,	48400	.57	.60	3.7	
6,	41209	.55	.58	3.6	
7,	32400	.48	.51	2.9	
8,	27225	.46	.49	2.9	

Price for a two tube junction safety catch box $125 00/100 — 6 tube j.s.c. box $90 00/100

Yours truly THE ELECTRIC TUBE CO.
John Kruesi
TREASURER

4

D
1883
El. Lt.

The Electric Tube Company,
65 Washington St.

T. A. EDISON Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, July 27th 188 3.

Samuel Insull Esq
65 Fifth Avenue City

Dear Sir.

Will you kindly send us full directions for shipping to Brockton Mass also if we can ship them at once or if we will have to wait until everything is completed. If there is nobody at Brockton to receive freight the latter course must be followed. Can we get storage room in the central station?

Yours truly

THE ELECTRIC TUBE CO.

1883-08-01

THOMAS A. EDISON,
No. 65 FIFTH AVENUE.

NEW YORK, Aug. 1st 1883

9. P.M.

Mr Edison

I made an estimate roughly and find the cost of the underground conductors as per map would come to $3.15 per 10 candle lamps without taking in the Paving.
Total cost $29900 00/00
As this figures are as low as I can put them.
I did not think it worth while to spend the time & money. If you think differently let me know

Truly Yours
J Kruesi

The Electric Tube Company,
65 Washington St.

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, Aug 1 1881

Thos. A. Edison
Central Sta. Con. Dept.
Dear Sir:

The .325" copper referred to in your favor of this date is all right. We have at your suggestion advised the Anaconda B. & C. Co. to change the order from .425" to .325" the latter being found amply large enough to carry the current, and lessening our loss on Lawrence feeders to some extent.

Respectfully,
John Kruesi

P.S. We have not had an opportunity to open cases, but will do so, and ascertain whether they are in accordance with invoice.

1883-08-06

The Electric Tube Company.

65 Washington St.

T. A. EDISON Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, Aug 6th 1883.

Samuel Insull Esq
65 Fifth Avenue City

Dear Sir,

In reply to your letter of the 4th. - would like to know what kind of samples you wish, such as you have on your desk or regular tubes, say nine feet lengths?

Yours truly

THE ELECTRIC TUBE CO.

Samuel

RECEIVED
AUG 6
1883
FILE No.

1883-08-15

The Electric Tube Company.

65 Washington St.

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, 8/6th 1883

Order No. 131 B.

Please furnish this company with, as soon as possible 405 round rods of electric copper .203 inch diameter each rod to be 20 feet 4" long.

Order #140

To Thomas A. Edison
65 Fifth Avenue City

Give Date and Number of Order on Invoice.

John Kruesi Treas.

per Samuel

1883-08-08

The Electric Tube Company.

65 Washington St.

T. A. EDISON Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, Aug 8th 1883

Tools required at a Central Station to work on underground conductors.

1 Rason pipe vice #2	$12.10
1 Stillson pipe wrench 18"	3.40
1 Saunders pipe cutter #2	3.60
1 Malleable die stock & dies #1	13.50
1 screw wrench 12"	.80
2 cape chisels 5/8" each	.40
2 cold " 5/8" "	.40
2 " " 1/2" "	.40
1 Hack saw 12"	1.83
1 Flat 2nd cut file 12"	.35
1 3 cor 2" " " 6"	.15
1 round " " " 6"	.15
1 " bastard " 12"	.35
1 Mechanics hammer	1.25
1 Hammond #3	1.75

THE ELECTRIC TUBE CO.

Tool list #2 1883-08-08

The Electric Tube Company.

65 Washington St.

T. A. EDISON Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, 188

1 Hide faced hammer #3	$1.90
1 pr line pliers	1.50
1 putty knife 12"	.30
1 framing chisel 1 5/8" wide	.40
1 micrometer gauge wire gauges	5.75
1 soldering lamp (alcohol)	2.87
1-20 gal Farnus boiler John Lowery Drive 97 Beekman	20.70
1 large dipper	.40
1-5 gal Kettle Rivited	2.50
1 5" ladle	.35
Tube Co 1-10" funnel riveted (with strainer)	1.12
1 long & one short sure auger 66 20¢	
1 oil can 1 qt	.30
1 steel tape line	6.25
1 small funnel riveted	.80
1 alcohol can 1 gal	.50

THE ELECTRIC TUBE CO.

Tool list #3.

1883-08-08

The Electric Tube Company,

65 Washington St.

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, ... 188

Special made tools.

1 set of insulating tools 4 pcs	$ 10 00
1 tee socket wrench for 5/8" tap bolts	2.30
1 socket " " 3/8" " "	2.00
1 extension socket wrench, 3/8" square	2.00
1 S wrench for 3/8" nuts & [illegible] x [illegible] plugs	.53
1 S wrench for 3/8" & 1/4" set screws	.53
1 S " " 1/4" nuts & 1/4 & 3/8 plugs	.53
~~1 alcohol lamp~~	00
1 Hydrogen generator	80.00
1 plug drift for each size tube	2.00
1 spreading tool.	1.50
	$ 101.39
	90 61
	192 06

Tools on Shut #1 & #2 can be furnished ready made.

THE ELECTRIC TUBE CO.

[TO C. H. CAMPBELL]

1883-08-18

The Electric Tube Company,

65 Washington St.

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, Aug 18th 1883.

Mr Campbell
C/o Thos A. Edison Esq
65 Fifth Avenue City

Dear Sir.

If you wish to have the Special tools made please give us as much time as you can, as we could not get them made in less than a week.

Yours truly

THE ELECTRIC TUBE CO.
per,

1883-08-22

The Electric Tube Company,

65 Washington St.

T. A. EDISON, Pres.
JOHN KRUESI, Treas
SAMUEL INSULL, Sec'y.

New York, Aug. 22d 1883

Mr. Edison OK

If you had any offer to make to Chas Wirth I believe he would accept it.
His contract with the party he is engaged will run out by the first of Nov. and he intimated that he would rather change than renew.

Truly yours

John Kruesi

1883-08-25

The Electric Tube Company,

65 Washington St.

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, Aug 25th 1883

Received from Mr. T. A. Edison
$ 500.00 five hundred Dollars Cash.

THE ELECTRIC TUBE CO.
John Kruesi TREASURER.

1883-08-26

The Electric Tube Company.

65 Washington St.

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, Aug 26th 1883.

Samuel Insull Esq
65 Fifth Avenue City
Dear Sir,

Below find amount due us from the Edison Companies:—

The Edison Elec Ill Co	$ 9831.00
The Edison Elec Light Co	668.80
The Edison Co for S. L.	.....
	$ 10499.80

Abt. 100 the Isolation Co, for material re returned by them. about $89.00

Yours truly
THE ELECTRIC TUBE CO.

1883-09-04

The Electric Tube Company,

65 Washington St.

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, Sept 4th 1883.

Samuel Insull Esq
65 Fifth Avenue City.
Dear Sir,

We receive of the enclosed check, letter & voucher this A.M. from The Edison Machine Works.

The check has no signature. Please oblige us by getting check signed & return same.

Yours truly

THE ELECTRIC TUBE CO.

1883-09-04

RECEIVED
SEP 4
NEW YORK

The Electric Tube Company,

65 Washington St.

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

FILE No. 4332

New York, Sept 4th 1883.

Thos A. Edison Consult Elect
65 Fifth Avenue City.
Dear Sir,

We wish to begin shipping our goods for Lawrence Mass the end of this week.

Please arrange that somebody will receive them & store them in a dry place

Yours truly

THE ELECTRIC TUBE CO.
pres'd.

Credit Richardson
Otis

1883-09-11

The Electric Tube Company,

65 Washington Street,

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, Sept. 11th 1883

Received from T. A. Edison
on acct. of foreigne Order $300.00
& Sept. 10th $600.00
$900.00

THE ELECTRIC TUBE CO.

John Kruesi TREASURER.

1883-09-17

The Electric Tube Company,

65 Washington St.

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, Sept 17th 1883

T. A. Edison Order No. 1699

Please furnish this company with Straight round rods of Electric Copper rods in lengths of 20 ft 4 inches as follows—

7	Rods	.707	inch Diameter	
7	"	.671	"	"
7	"	.633	"	"
7	"	.592	"	"
7	"	.548	"	"
7	"	.500	"	"
7	"	.4544	"	"
10	"	.380	"	"
10	"	.365	"	"
10	"	.325	"	"
10	"	.300	"	"
10	"	.284	"	"
10	"	.259	"	"
10	"	.238	"	"
150	"	.180	"	"
150	"	.165	"	"

RECEIVED SEP 17 1883 ANSWERED Sep 17/83 FILE No.

Yours truly

Give Date and Number of Order on Invoice.

John Kruesi Treas.

per

#235 + #236
17th

1883-09-22

(40)

The Electric Tube Company,

65 Washington Street,

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

RECEIVED
SEP 25 1883
ANSWERED

Sept 25 1883

New York, Sept 22 1883.

FILE No.

Thos. A. Edison Esq
Construction Dept.
65 Fifth Avenue City

Dear Sir,

We beg to state that we withdraw our estimates for underground conductors for the following districts:—

Buenos Ayres. Argentine Republic
✓ Evansville Indiana.
✓ Charleston S. C.
Portland Me.
✓ Lowell Mass.

Please favor us with the acknowledgement of the withdrawal oblige

Yours truly,
THE ELECTRIC TUBE CO.
John Kruesi TREASURER.

1883-09-26

The Electric Tube Company,

65 Washington Street,

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, Sept 26th 1883

Samuel Insull Esq
65 Fifth Avenue City

Dear Sir,

The samples for the German Co are ready for shipment, please send us shipping directions

Yours truly

THE ELECTRIC TUBE CO.
Johnd.

1883-09-26

The Electric Tube Company,

65 Washington Street,

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, Sept 26th 1883.

Thomas A. Edison Esq
Construction Dept.
65 Fifth Avenue City

Dear Sir,

We received a letter this A.M. from W. J. Jenks Brockton Mass, in which he orders tools as per enclosed lists, he further orders a lot of #41 coupling joints & #56 service joints.

Please send us an order for tools & the necessary joints at your earliest convenience.

We will ship tools & joints without delay.

Yours truly

THE ELECTRIC TUBE CO. [illegible]

[ENCLOSURE]

1883-09-26

The Electric Tube Company,

65 Washington Street,

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, ... 188

1 Stelson Pipe Wrench 18"
1 Saunders Pipe Cutter #2
1 Wall Iron Die Stock and Dies #1
1 Screw Wrench 12"
1 Hack Saw 12"
1 Hammond Hammer #3
1 Rawhide " 3
1 Putty Knife 1/2"
1 Framing Chisel 1/8" wide
1 Micrometer Gauge
1 10" Funnel with Strainer (inverted)
1 small Funnel (inverted)
1 set Insulating Tools 4 pieces
1 T Socket Wrench for 3/8 tap bolts
1 Socket Wrench " 3/8 " "
1 Extension Socket Wrench for 3/8 Nuts
1 S Wrench for 3/8" Nuts and 7/16" Nuts and 1" plugs.

[ENCLOSURE]

9/27/53

Elec tube co

Encloses order form

W. J. Jenkins

Robbie

Put order

numbers on

this

Note 8

[ENCLOSURE]

1883-09-26.

The Electric Tube Company,

65 Washington Street,

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, ... 188

1 S Wrench for 3/8" and 1/4" set screws.
1 S " " 1/4 nuts & 1/4 & 3/8" Plugs
1 Plug Drift for each size tube
1 Spreding Tool
1 Brest Drill and set Drills
and Taps
1 Gasoline Generator

1883-09-28

Sept 28th 83

Dear Sir

We are in receipt of your orders # 265 to 268 We have already sent part of orders # 266, 267, 268 + will send balance to-day

Yours truly THE ELECTRIC TUBE CO.

1883-10-04

The Electric Tube Company,

65 Washington St.

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y

New York, Oct 1 1883

Order No. 1730

Please furnish this company with as soon as possible, sets of tubes copies in length of 20 full 4 inches, as ordered.

2440	rods	Diameter	.592	inch
174	"	"	.548	"
285	"	"	.425	"
87	"	"	.325	"
147	"	"	.238	" x
513	"	"	.220	" x
81	"	"	.203	" x
183	"	"	.180	" x

Full Rev'd

Thomas A. Edison
Construction Department
65 Fifth Avenue City

Code 784
Oct 4/83

Give Date and Number of Order on Invoice.

John Kruesi Treas.

per Schmidt

1883-10-11

The Electric Tube Company,

65 Washington Street,

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, Oct 11th 1883

T. A. Edison C.S.C. Dept.

Dear Sir.

In answer to the second part of your favor of this date would say our contractor S. O'Conner is going to Lawrence this evening, and will no doubt make everything satisfactory.

I am surprised as Stevens wrote me that the Paving was done very well & mentioned that every body was pleased the way that work was done the same we heared from O'Conners Brother who does the paving

Yours truly
J Kruesi

1883-10-12

The Electric Tube Company,

65 Washington Street,

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, Oct 12th 1883

Thos A. Edison Esq
Construction Department
Dear Sir

We expect to ship the first lot of tubes to Fall River Mass. about the 20th of this month. Please write to parties to have a dry storage place for them.

Yours truly

THE ELECTRIC TUBE CO.
J Kruesi

1883-10-16

The Electric Tube Company,
65 Washington Street,

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, Oct 16th 1883.

Mr Tato
Dear Sir
Please have enclosed checks signed by Mr Edison at the earliest possible moment.
Yours truly
THE ELECTRIC TUBE CO.

Mr Clark

1883-10-19

The Electric Tube Company,
65 Washington Street,

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, Oct 19th 1883.

J. G. Edison Esq
Construction Department
65 Fifth Avenue
Dear Sir,
Please send us an order for services (tubes, box, joints, compound &c) for Fall River Mill
Also please let us know whether you wish to order any tools for the Fall River Company.
Yours truly
THE ELECTRIC TUBE CO.

1883-10-20

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

NUMBER	SENT BY	REC'D BY		CHECK
H89	Cu	Dy	11 Cd	

Received at 852 BROADWAY. 10/20 1888.

Dated Lynnfield Mass 20

To J Donsell

65 5 Ave

Will be in New York Monday morning Can push New bourgh fast

John Kruesi

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

Order #1782 1883-10-23

The Electric Tube Company,

65 Washington Street,

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, Oct 23rd 1883

Thomas A. Edison Const. Dept.
65 Fifth Avenue City

Please furnish this company with, as soon as possible

X 228 rods of electric copper .425 in diam
687 " " " " .365 " "
324 " " " " .340 " "
285 " " " " .325 " "
609 " " " " .300 " "
X 96 " " " " .220 " "
276 " " " " .165 " "
in lengths of 20 feet 4 inches

Yours truly
John Kruesi Treas

Give date number of order on invoice

1883-11-05

The Electric Tube Company,

65 Washington St.

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y

New York, Nov 5th 1883

Order No. 1828

Ansonia Brass & Copper Co.
Please furnish this company with

200 rods of Electric Copper in straight lengths of 20 feet 4 inches.
.500 inch Diameter.

Please hurry this order through as much as possible.

Order 346
Nov 7 1883

Give Date and Number of Order on Invoice.

J. Kruesi Treas.

per

Form No. 1. Tube 80 1883-11-12

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	RECD BY		CHECK
70	Cu	em	1	910

Received at 852 BROADWAY.

Dated Fall River Mass Nov 12 1888.

To N. Israel
65 Fifth Ave

I must pay double price or stop hurry up Copper ordered last

J. Kruesi

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-11-15

The Electric Tube Company,

65 Washington Street,

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, Nov 15th 1883.

Thomas A. Edison Esq
Construction Dept
65 Fifth Avenue City

Dear Sir,

Your favor of 14th inst received:- We cannot ship five car loads of Sterling, as we have not the storage facilities & know of no place in the neighborhood where we could store until we could ship car loads. We shall however endeavor to ship 5 ton lots

Yours Truly

THE ELECTRIC TUBE CO.

Johnson

1883-11-16

ask Kruesi if he will hurry the work as soon as he possibly can

The Electric Tube Company,
65 Washington Street,

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, November 16 1883

Can you give us an estimate this for C. E. Chandler Co 30 Dutch St. City

Dear Sir, We will commence the work as soon as possible

We are at present unable to buy your proposed extensions on account of not having any experienced men available

Yours truly

THE ELECTRIC TUBE CO.

John Kruesi TREASURER.

The extension of feeder #12 we will complete at the earliest time possible

22

Nov 16/13

J. Kincaid

re: Proposed Extensions

J. A. Ridley Esq

This is somewhat bad for us as I understood Mr Ainsi to agree to take this work off our hands - two weeks ago.

Would you kindly try and induce him to help us out in this matter

Yours

Johnstock

Nov 16th 13

Form No. 1.

1883-11-17

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. ROBERT GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
441	Cu	Cm	0 30

Received at 852 BROADWAY.

Dated Nov 17 1888.

To Samuel Insull

65 Fifth Ave

Must have blank checks today without fail

Electric Tube Co

This telegram has just been received at the office in 852 BROADWAY, just below Fourteenth Street, where any reply should be sent.

DIRECT WIRES.

1883-11-22.

The Electric Tube Company,

65 Washington Street,

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, Nov 22nd 1883

Thomas A. Edison Esq
65 Fifth Avenue
Dear Sir,
We are nearing completing our price list & expect to be through with it in a few days, when we will send you one
Yours truly
THE ELECTRIC TUBE CO.
Schmid

1883-11-23

The Electric Tube Company,

65 Washington Street,

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, Nov 23rd 1883.

Samuel Insull Esq

Dear Sir, In reply to yours of the 22nd inst. — I have, this a. m. completed what I consider the most urgent part of the work in the 1st district. I will finish the rest as soon as I possibly can.

Yours truly

John Kruesi

1883-11-23

The Electric Tube Company,

65 Washington Street,

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, Nov 23rd 1883.

Samuel Insull Esq

Dear Sir, We have overdrawn our bank account, be sure to let me have some funds to-morrow.

Yours truly

J Kruesi

P. S. Checks will come to Bank Monday K. G

1883-11-23

The Electric Tube Company,

65 Washington Street,

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, Nov 23rd 1883

Thomas A. Edison Esq
Construction Dept
New Yorr

Dear Sir,

We will avail ourselves of the opportunity to urge our estimate for St Louis. We also place a bid, based upon the arrangement as per your favor of the 22nd inst.

Yours truly

Samuel

1883-11-23.

The Electric Tube Company,

65 Washington Street,

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, Nov 23rd 1883.

Thomas A. Edison
Construction Department.

Dear Sir,

Please send us an order for tools for Newburgh. Share the price on them not exceed $18.00/100, as in Fall River.

Also send requisition for services for Newburgh

Yours truly

Samuel

THE ELECTRIC TUBE CO.

RECEIVED
NOV 27 1883
ANSWERED
Nov 27 1883
FILE No.

1883-12-13

The Electric Tube Company,

65 Washington Street,

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, Dec 13th 1883

A. O. Saty Esq
65 Fifth Avenue
City

Dear Sir

Referring to enclosed memorandum; The first 2 letters to Mr Insull one to 65 & the other to England did this to make sure that he would get either one or the other. It refers to a shipment which Mr Insull would attend to in England

Yours truly

THE ELECTRIC TUBE CO.

Johnson

[ENCLOSURE]

1883-12-12

Mr. Kruesi,

Will you please explain to me, either personal or by letter, what the enclosed refers to, as Mr. Insull has gone away and I am unable to comprehend the contents.

A. O. Tate,

December 12th. 1883. per G. C

1883-12-13

The Electric Tube Company,

65 Washington Street,

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, Dec 13th 1883.

Thomas A. Edison
Construction Dept
Dear Sir,

We beg to state that we have withdrawn the following estimates:
Hartford Conn
Haverhill Mass.
Utica New York
Gov's Isl and, N.J.
The developments of installing the 11 districts, Brockton Lawrence, Fall River & Newburgh, compell us to base the above estimates on different figures.

Yours truly

1883-12-19

The Electric Tube Company,

65 Washington Street,

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, Dec 19th 1883

Thomas A. Edison Const Dept.
65 Fifth Avenue.
Dear Sir,

In reply to your favor of the 19th inst.
In rendering our bid for the Fall River Mass district, we included the laying of services, the laying of mains in Temple Court & the service to Post Office as per map.
As we did not put in the service stubs & the service to the Post office & laid 20 1/3 feet less tubing in Temple court, than contracted for, we gave you credit for the above, as per our bill of Dec 13 1883.

Yours truly

1883-12-20

The Electric Tube Company,

65 Washington Street,

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, Dec 20th 1883.

Thomas A. Edison Orange N.J.
65 5th Avenue
New York.

The weight of the sunrays sent to Newburgh is 42 1/6 lbs.

Herewith return your order # 665 which you cancel as per your letter of the 19th inst.

Yours truly
THE ELECTRIC TUBE CO.
Johnson

1883-12-21

Newburgh December 21st 1883

The Electric Tube Company
To J Scott Wiseman

Dec 15	8 pr Mid Shin	8.00	6 Silvers	1.50		9.50
17	3 to Montgom St	1.50	2 to Grand St	1.00		2.50
18	3 to Grand St	.75	3 to Montgom St	.75		1.50
21	1 pr Mid Shine	.50	1 pr Bags	.25	1 Wood to Bags	.100 / 1.25
						15.25

Rec Payment
J Scott Wiseman

1883-12-29

The Electric Tube Company,

65 Washington St.

T. A. EDISON, Pres.
JOHN KRUESI, Treas.
SAMUEL INSULL, Sec'y.

New York, Dec 29th 1883

Thomas A. Edison Construction Dept
65 Fifth Avenue City.

Gentlemen,

In reply to yours of the 26th inst: We find you have charged us with $110[illegible] 4/100 worth of copper whereas we only received copper & bills to the amount of $1148[illegible] 24/100. thus showing a difference of $118[illegible] 3[illegible]/100 in our favor. This added to your balance of Dec 1, as per your statement, shows a balance of $7124 52/100 in our favor same as per our balance sheet of Dec 1. Return herewith your statement please look over same & you will find we are correct

Yours truly

THE ELECTRIC TUBE CO.
[illegible]

Please pay this your immediate attention and oblige yours J Kruesi

[illegible]

THOMAS A. EDISON,
Central Station, Construction Dep't.,
No. 65 FIFTH AVENUE,

(1883) Form H.

New York, ... 188

Mr. Tate

Will you please send me the map of Llewellen Park. The one you copied from Hammond's Camps. If you have not copied it yet let me have it for ½ hour to make a rough copy. Oblige

Yours truly
A. Kruesi

1883. Electric Light - Foreign - General (D-83-036)

This folder contains correspondence and other documents relating to the establishment of electric lighting systems in foreign countries. Among the correspondents are Willis N. Stewart, Edison's agent for the electric light in Chile; George S. Ladd, agent for Hawaii; and G. W. Sherman, agent for Argentina.

All the documents have been filmed except for duplicate copies of selected documents.

1883-01-24

Subject,

OFFICE OF THE
EDISON ELECTRIC LIGHT,
Nº 222 SANSOME ST.

GEO. S. LADD.

San Francisco, January 24 1883. 188

In reply to yours
No.

Thos. A. Edison Esq.,

New York.

My dear Sir:-

Through my correspondent at Honolulu, I am informed that we can probably do some business in the Sandwich Islands provided we can have the exclusive right to use your patents and sell your machinery in that territory. You will understand that there are no patent laws in those Islands, but in order to organize a little company at Honolulu it will be necessary to give it exclusive rights for the Islands so far as it is possible to do so. I address you directly in the matter as I suppose the rights of the New York Companies do not exceed beyond the United States. If they do so however, please refer the application to Maj. Eaton.

The population of the Hawaiian Islands is reported at 57985 altogether of which less than 5000 are whites, the remainder being natives and Chinese with whom no business could be done. It is proposed to start in Honolulu with two central station plants each supplying from 1000 to 1500 lamps.

Please furnish me at the earliest moment with a detailed estimate of the cost of such a plant at New York and the

1883-01-24

probable expense of erecting, installing and operating the same , also give figures for overhead wires as well as subterranean wires, and as much information as possible about village systems.

Very truly Yours,

Geo. N. Ladd,

Auditor

6

FABBRI & CHAUNCEY.
P.O.BOX 1471.

48 South Street
Fabbri & Chauncey
New York, Jan. 24, 1883.

1883.01.24

Thomas A. Edison Esq.,
65 Fifth Avenue,
City.

Dear Sir:-

We are in receipt of your favor of the 22 inst., which is carefully noted, and from which we have withdrawn endorsm as stated by you.

We are inclined to look favorably on the proposition of Mess. Moreira Saraiva; but, of course, all business connected with Brazil must be referred to our general agents for that Empire, Mess. Jno. Moore & Co. of Rio de Janeiro.

We have written fully regarding the matter to Mess. G. Amsinck & Co, and have requested them to explain it to Mess. M. & S.

We remain, Dear Sir,
Yours very truly,
Fabbri & Chauncey

13 Engl.

Mr. Edison,

1883-01-26

Letters just received from Brazil state that the patent law has passed the Congress, that the officials are now engaged in getting up regulations, and that probably at an early day our patents will be issued.

Meantime, we are sending price lists and full information to our friends in Brazil, so that they can at once get ready for Isolated business.

Who shall bear the expense of shipping dynamos &c. to Brazil? We could ship them at our own expense, but I hate to do this. I think the people down there ought to get up a syndicate and furnish the money. What do you say?

S. B. Eaton

Jan. 26th. 1883. per Mc.G.

It has never been clear to my mind what our arrangement are with Fabbri & Chauncy - If they had nothing to do with it we could do considerable business

[TO SAMUEL INSULL?]

Australia

Copy. 7 1883-03-01

Antwerp, March 1, 1883

Welles

New York:

When you have an opportunity you might inform Mr. Edison that the Edison light companies projected in Australia have not proved such a success as was expected.

Draper writes that they have not got their capital yet, principally owing to the fact that our mutual friend Sir Julius Vogel, finding that he could not carry out his Brush enterprise, set himself to work to defeat the Edison, and has spent money like water to do it.

He is trying to force a compromise on the Edison people, just as he tried with us on the telephone.

Yours truly,

F. R. Welles.

1883-03-09

COPY.

Ottawa, 9th. March 1883.

Dear Swinyard:-

I have seen the Minister of Customs to day on the subject which it was agreed I should discuss with him as to the importation of the key sockets. He says that by their present regulations they cannot take a bond to re-export the goods, but that if you will write a letter to him, which you can enclose to me asking for permission to import say 150 of them for "exhibition" purposes only and offer to pay the duty on importation, if the Government will refund it on your re-exporting the goods within six months, he will write an official letter agreeing to that proposal.

This will accomplish the same purpose as if we entered the goods on a bond undertaking to re-export them ourselves.

Send the letter to me and I will get the official reply at once, and you can then I think with safety import the goods.

We discussed the question of duty on carbon filaments and he came to the conclusion that they were liable to a duty of 20 per cent ad valorem. As the articles have no market value, the Edison Co. will have to make up their actual value or cost as nearly as possible, and enter them at that rate.

I am however to write to him a letter for his consideration and will obtain an official reply.

I also saw Mr. Cambie and he has promised to let me have to-morrow copies of the specifications for patents in question, and as soon as I obtain them I will carefully consider the question

1883-03-09

and give an opinion in conjunction with either Abbott or Mc.Carthy. I talked the matter over with Cambie who seemed to think that we could without risk import the parts provided for the whole as patented was not imported. His opinion of course is unofficial, and the matter would rest with the decision of the Minister himself, and I intend to have a quiet conversation with him on the subject at the earliest opportunity so as to elicit his views if possible on the subject.

I shall give careful consideration to the whole matter and advise you in the course of three or four days.

Yours very truly,

(Signed) Hector Cameron.

1883-03-24

Subject, -: Hawaiian Islands :-

OFFICE OF THE
EDISON ELECTRIC LIGHT,
No. 222 SANSOME ST.

GEO. S. LADD.

San Francisco, March 24 1883. 188

In reply to yours 8 March.

No.

Saml. Insull, Esq.,

65 Fifth Ave.,

New York.

My dear Sir:-

I have been absent and have just received your letter. I will see Mr. Merrill, but have already enlisted the most desirable party at Honolulu. I could not answer the former letter because I was waiting for the estimates on village systems promised by Mr. Edison and yourself and just received.

I shall send the whole matter to Honolulu to-morrow and report what my correspondent replies. His last letter was, that if terms were satisfactory and the estimates of plant and profit sufficiently inducing he could form a company at once. Im afraid, however, he will object to the percentages named because, as you doubtless know, there are no patent laws in Hawaii.

How about isolated plants for there. At what flat price can he have dynamos, lamps &c., independent of any stock company and royalty.

Very truly Yours,

Geo. S. Ladd

2

Drexel, Morgan & Co.

P.O. Box 3036. Fabbri

New York March 26 1883

1883-03-26

Dear Mr Edison,

I am in receipt today of your letter of even date in reference to disposal of our Electric Light interest for Norway Sweden & Portugal.

On Saturday last D.M.& Co cabled Mr Johnson as follows:

"We leave to your discretion arrange Norway Portugal - but to avoid mistakes let Gounand understand we withdraw from

"from all further negotiations with him about Countries named Endeavor obtain refund cost patents £2500 Reserve rights Electric Railway"

Yours
Very truly
E. F. Fabbri

Brought

Hawaii

1883-04-10

Subject, -: Hawaiian Islands.:-

OFFICE OF THE
EDISON ELECTRIC LIGHT,
No. 222 SANSOME ST.

GEO. S. LADD.

San Francisco, April 10 1883. 188

In reply to yours Mch. 30

No.

Saml. Insull, Esq.,

65 Fifth Avenue,

New York.

Dear Sir:-

Yours with copies of letters received. My letter of Jan. 24. asked for terms and full information concerning village plants &c. Your reply of Feb. 2 acknowledged receipt and promised data in a few days. Mr. Edisons favor of Feby 8 gave his terms and promised the estimates"in a week or so". Your letter of Mch. enclosed estimates for Brockton, Mass., and then, for the first time I was in position to submit the matter to the Honolulu people, which I did by the first vessel and so advised you by mail.

I trust this acquits me of the suggestion of neglect? I also advised Messrs. Merrill & Co. of the situation and that if our present correspondent did not arrange to take up the matter, I would promptly call upon them.

Very truly Yours,

Geo. S. Ladd

THOMAS A. EDISON,
No. 65 FIFTH AVENUE.

1883-04-19

NEW YORK 188

40 Light Machine,	3750
20 Light.	2200
10 Light,	12.75
Lamps,	45 Each

25 pct off to ferro. these prices

40 Light Engine.	900
20 Light Eng.	
10	750.

Nothing off on Eng its price inc of any

(Edison)

35

Geno Apr. 19.83

Hawaii

1883-05-04

Subject, -: Hawaiian Islands.:-

OFFICE OF THE
EDISON ELECTRIC LIGHT,
Nº 222 SANSOME ST.

GEO. S. LADD.

San Francisco, May 4 1883. 188

In reply to yours Apl. 18 & 24.

No.

Saml Insull, Esq.,

65 Fifth Avenue,

New York.

Dear Sir:-

I have just received a reply from Honolulu saying they will reply more fully by the next steamer. They have to pay $10. @ $11. per ton for coal and they do not hope ever to place more than 2000 lamps at Honolulu, they evidently think the cost on the terms named will make the light too expensive to compete with coal-oil which is now used. I would advise making the terms just as low as you can afford, both for rights and for plant - central and isolated. It is a very limited field and a very small white population.

Cannot you send me several sets of those village estimates?

Very truly Yours,

Geo. S. Ladd

Barranquilla. Town at the mouth of the Magdalena River in the South American Republic of Colombia.

1883-05-04

COPY

The United States Electric Lighting Co.,

59 and 61 Liberty street.

May 4th. 1883.

Mr. J. Ferro,

New York City.

Dear Sir:-

We would ask your pardon for our delay in giving you replies to the two letters you submitted to us some time since, as we have been moving our office and the writer has had his whole time taken up by giving attention to the necessary alterations, repairs & arranging.

In regard to Barranquilla we would answer:-

1st. The Electric Light is surely a solved problem & can be depended upon. You may judge of this yourself from one fact alone viz:- that we have received the contract to light the great East River Suspension Bridge with 70 arc lights & no other provision for light has been made.

2nd. It is much preferable to gas light & is more economical, except where more light is put in than the gas furnished.

3rd. To light streets for a distance of 40,000 feet, we think you would need at least 100 arc lights. The cost of a plant with power for that number of lights would be approximately as follows:

2--50 light machines at $4,000.....	$ 8,000
100 Double carbon lamps at $80.....	8,000
Forward.....	$16,000

1883-05-04

Brought Forward.....	$16,000
2 Adjustable bases at $30.....	60
2 Rheostats at $125.....	250
2 Current regulators at $75.....	150
2 Circuit indicators at $35.....	70
15 Miles wire at $230.....	3,450
8 Miles poles set at $5. each.....	1,600
Material & labor putting up wire, $25. per mile...	375
100 Frames & hoods for lamp posts at $12.....	1,200
Material & labor of hanging lamps at $1.....	100
	$23,335

14 X 22 Buckeye engine.....	$ 2,300
100 H. P. boiler.....	1,500
Setting engine & boiler.....	1,000
Steam connections.....	100
Pump.....	200
Feed water heater.....	400
Shafting pulleys & belting.....	450
	$ 5,950
Total.....	$29,285

The expenses per year of 365 days, the lights burning eleven hours per night would be about as follows: Carbons $6,850; 550 tons Anthracite coal or its equivalent; Wages of an engineer, fireman, 4 men to attend to lamps & 1 man to attend to the line wire &c. The supplies for machines such as Brushes & ordinary

1883-05-04

repairs cost about $150. for each machine per year, & for lamps about $5. for each lamp. We would call your attention to the fact that these lights would give many times the amount of light that naptha or gas does.

We trust that this data will be satisfactory & that your friends will favor us with an order.

We would beg your indulgence for a day or two in regard to the estimate for Cartegena as it requires considerable calculation & we have so many estimates to make up.

We are very truly yours,

U. S. Electric Lighting Co.

W. M. Allaire.

1883-05-11

gs
File

Dear Sir:

The letter from J V Magallon just at hand - Its nature is such that it would be an injustice to all concerned to attempt quote a price for apparatus to perform to give an uncertain unknown result the letter is to vague, The party writing ~~[illegible]~~ does not give sufficient explanation as to the amount of light each lamp should give or if they are or mean descent I should not be willing to sell the machinery without a certainty that it would be successfull in every respect & give satisfaction to the purchaser both as to working, economy, & results required, hence, I ask that you write your correspondent to obtain the following

A Map of Barranquilla showing the squares streets, etc, / such map should be drawn to scale so measurements can be taken,

2nd Let the position of the street lamps be marked by a cross X on the map. also the position of the houses that are to use the light with the number of lights marked & the average hours that the

partion will burn these lights or in other words the average number of hours the party will burn each light every night -

Also mark on the map the position of the ground or the building with its width length of ground or building also the height of the ceiling of there is already a building -

The price of steam coal,
If the water is good or bad for steam boilers, The price of the chad of obtaining water The price of wood

If the streets are paved or unpaved or any portion paved if any paved mark on the map -

If there are carts in Barranquilla capable of handling a large boiler,

The duties on machinery such as will be used in Electric Lighting -

The Cost of Lumber Common per 1000 feet
The Cost of Brick per thousand feet -

1883-05-11

(3)

The average closing time at night of the stores,
The average time people go to bed in private houses —

The population of Barangueda,

State that, ~~our lights~~ we make several sizes of lamps, all of which can be worked on the same wire.
No 1 Equal to best gas jet. No 2 Equals 1 3/4 of gas jet ~~or~~ or 3 Kerosene jets, No 3 Equals 3 gas jets. or 5 Kerosene burners No 4. Equals 5 gas jets of 8 Kerosene lamps — No 5 Equals 10 gas jets or 16 Kerosene jets —

We claim 10 jets each equal to a gas jet for every indicated horse power of the Engine, & the other lamps in proportion, that is to say 5 lamps of 2 jets each - 1 lamp ~~of~~ giving a light equal to 10 gas jets —

I herewith send you as a sample the town of Dahuilla Pennsylvania showing that portion of the town

1883-05-11

where the lights are most used, that is to say the best portion of the town that would pay the greatest profit on the smallest investment. The lines running in the blocks with figures at the end indicate the number of gas jets. The lines in the streets show other lines. The star within red circle shows the Central station, and red lines the wires from the streets wires to the station. There are about 1800 gas jets in this area. The Cost of the whole thing erected complete is about 29,000. including the building wires & all apparatus at the stations & meters. The Extra Cost of Erecting at Barranquilla would be the fares of Experts freight Custom duties & increased cost of materials which must be obtained at Barranquilla —

Please Explain to your correspondent, that the wires are on poles that wires is run from the main street wires where they Enter a meter & from that to different parts of the building where the lamps are situated. The Cost of wires & fixtures in the building are paid by the person using the light. The meter measures accurately the

1883-05-11

amount of light used in the house
the unit of light is the amount of
light obtained in one hour from
a candle burning 120 grains per
hour of tallow, 10 such candles are
equal to the average coal gas jet in
practice at Danville we
sell Earth gas jet for one cent
per hour for each light equal to 10 candles for
1 hour for 1 cent. Two thousand candles
light measured on the meter
Equal the light quantity of 1000 ~~cu~~ cubic feet of common
Coal gas for this we charge $2.

The dividends will be about 28 per
cent at Danville on the cost of
the complete plant.

Mr Ferro

P.S. These are cut prices at Danville we shall
have to add your own profit on

Edwin

No 9

J Perro

May 11th 1883

T. A E's hand memo. on J.V. Magellan's letter to Berengrello -

1883-05-12

THOMAS A. EDISON,
No. 65 FIFTH AVENUE.

NEW YORK May 12 1883

J Ferro

Our special prices to you for machines & Lamps are, as follows —

40 arclight machine, $3576
20 " " $1963
10 " " 11.93

arc Lamps each $42.

Incandescent Lamps — 1.00
Sockets about 1.25

Thos A Edison

PS

Engine for 40 Light. 900
10 " 20 " 750
50 " 10 "
10 " 800

Our special prices to you

MEXICO 1883-05-12

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

This Company **TRANSMITS** and **DELIVERS** messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of **Unrepeated Messages**, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message. This is an **UNREPEATED MESSAGE** and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
607	Ex	R	1098

Received at 852 ~~791 BROADWAY.~~

Via Galveston Dec

Mays 12 1882.

Dated, Mexico 12

To Thos J Edison Edisons Electric Light Co

George Wimmecken has not my powers to arrange any business whatever.

Porfirio Diaz

This telegram has just been received at the office in 791 BROADWAY, near Tenth Street, where any reply should be sent.

DIRECT WIRES.

1883-05-15

EDISON SPANISH COLONIAL LIGHT CO.
THOMAS ALVA EDISON, *President.*
OFFICE, 71 BROADWAY, ROOM 33.
P. O. BOX 2596.

RECEIVED
MAY 16 1883
ANSWERED

.....188... NEW YORK, May 15th 188 3
FILE No.....

My dear Mr. Edison:

Besides transmitting to the Havana agent the facts concerning the deleterious effects of water gas I will state to him that Mr. Navarro owns the patents of Tipie Dashmuley for the Island of Cuba in this opinion no one else can manufacture it there.

Yours very truly
Fernando Navarro

Thos Alva Edison Esq
65 - 5th ave

THE ARGENTINE EDISON LIGHT CO.

65 Fifth Avenue,

PROSPECTUS.

New York, May 17th. 1883.

A company called the Argentine Edison Light Company has been organized with a capital of $500,000 to purchase the patents of T. A. Edison for electric lighting in the Argentine Republic and which are now owned by the Edison Electric Light Company of New York, and to operate the same in the Republic.

The amount to be paid the Edison Electric Light Company for the patents and franchises is Three hundred thousand dollars in fully paid shares of the Argentine Company. Of this amount the New York Company will sell $100,000 stock at 50 cents on the dollar to operate the business. It is thought that $37,500 will be sufficient to send machinery and erect in the best portion of the City of Buenos Ayres a complete central station system supplying lights equal to 1600 gas jets. If it is found that this amount is sufficient the subscribers will have the privilege of taking the remaining $25,000 of stock at 50 cents on dollar if they so desire within one year from date. The $200,000 of stock then remaining in the treasury is to be sold in Buenos Ayres at par or

at a premium according to the success of the first station and with the funds thus obtained a larger central station is to be put up or the Argentine Company itself will be sold out to a national company formed in Buenos Ayres for cash and stock sufficient to give a large return to the present subscribers. Mr. George W. Sherman, for many years a resident in the Argentine Republic, has been engaged to represent the Argentine Company there and is to receive from the New York Company sufficient stock to obtain his active co-operation in furthering to the utmost the success of the central station in Buenos Ayres and the Argentine Company's interests generally throughout the Republic.

The City of Buenos Ayres affords the most lucrative field for electric lighting of any city in the world. The average closing time of stores being eleven P. M. and the price of very poor coal gas being $6,50 per thousand feet. With these long hours and high price, it is believed that the profit will not be less than 150 per cent on the investment annually.

The shares of the Company will be One hundred dollars par, and the name of the Trusteesfor the first year as follows: Thomas A. Edison, 65 Fifth Avenue, New York City; Samuel Insull, (Secretary of Electric Tube Company), 65 Fifth Avenue, New York City; Carlos

Carranza (Consul General of Argentine Republic), 60 Wall street, New York City; Joseph Hutchinson, of the Edison Company for Isolated Lighting, 65 Fifth Avenue, New York City; Frank S. Hastings, (Treasurer of the Edison Electric Light Company), 65 Fifth Avenue, New York City; George W. Sherman, Civil Engineer, Buenos Ayres; William S. Perry, 45 Exchange Place, New York City.

The stock subscribed to be paid for within ~~thirty~~ ~~fifty~~ days of this date.

NAMES & ADDRESS.	NUMBER OF SHARES.
Thomas A Edison	~~Thirty~~ Sixty.
Carlos Carranza	Two hundred
Francis R. Upton	Thirty
Margaretha Kolb	Thirty
Chas. A. Brown	~~Twenty~~ Fifty Dear
Lewis K. Leonard	Thirty
Pedro F. Roberts	Fifty - Victoria 180 B.A.
Ignacio Porrano	Fifty Florida 147.
Sigmund Bergmann	Twenty
L. C. Crimgock	Ten
[illegible]	Eight

NAMES & ADDRESS.	NUMBER OF SHARES.
R Pallister Hunter	Twenty (20)

JOHN NORTON & SONS,
No. 90 WALL STREET,
P. O. BOX 1901.

1883-05-18

New York, May 18th 1883.

Col. G. H. Sherman
65 5th Av.
City.

Dear Sir;

Kindly inform us if you have come to any definite decision concerning the Electric Light material for Buenos Ayres. We are now making up the cargo for the "Mendoza" and would be pleased to learn if you wish any room reserved

Yours truly
John Norton Sons

1883-05-21

Santiago, Chile,
May 21, 1883.

Maj. S. B. Eaton,
Prest., E. E. L. Co.

Dear Sir:- We are now in negociacion with several towns in this country for the establishment of our system of lighting, but with the information at hand I am unable to give any estimates of probable cost of installation - that is, on the Village plan, the only feasible mode in this country. I would therefore be greatly obliged if you would furnish me full details of cost, embracing the following points:

1.- Cost of dynamos, regulators, &c., and electromotive force of same.
2.- Plans of connections, where they may differ from the regular system.
3.- Price list of wires for out-door use, sizes, &c., and cost of insulators and other fixtures required.
4.- Cost of meters, without thermostatic regulator.
5.- Cost of lamps.
6.- Diagram of station connections, &c.

7. What was the average cost per lamp of the Rochelle installation?
8. What is the proportion of cost between an installation on the Village system and one on the regular plan?

There are doubtless many other points of equal importance which it would be well for me to understand, and I trust that full details may be given me. We can place at least 4000 lights in Brillian at an early day if we are in a position to give necessary details of cost.

I remain,
Yours Truly,
W. N. Stewart.

MEMORANDUM. 1883-05-25

FROM

B. DE SOLA & CO.,

No. 46 Beaver Street.

To Mr Thos A. Edison

New York, May 25th 1883

Dear Sir

We herewith send you the box of samples, which we have received from Messrs A. S. Senior & Co of Barranquilla, as requested by you.

Yours resp'ly

B. De Sola & Co

per

(1883)-05-31

Form No. 3.

CABLE MESSAGE.

THE WESTERN UNION TELEGRAPH COMPANY.

All CABLE MESSAGES received for transmission must be written on the Message Blanks provided by the Company for that purpose, under and subject to the conditions printed thereon, and on the back hereof, which conditions have been agreed to by the sender of the following message.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	RECD BY		CHECK
467	Fax	Md	3	Bunnagreen 37

Received at FILED AT 254 BROADWAY

6pm May 31 1883.

To Edison

Orange Thos A Edison

63 Fifth Ave

Meter

Edison TA. Handwriting 1883

THOMAS A. EDISON,
No. 65 FIFTH AVENUE.

NEW YORK 1883

Ferro.

Dear Sir

1150

I herewith give prices of our machines for working arc and incandescent lights. Boxed F.O.B.

Arc

40 Light machine	$ 4,687
20 " "	2,750
10 " "	1,590
Arc Light Lamps each	$ 56.

260

The 40 Light machine will run	350	incandescent lights 2 gas jets each
20 " "	150	"
10 " "	75	"

Armington & Sims price for Steam Engines are

Engine to work 40 Light	$ 1125
" { 20 10 "	$ 950

Incandescent Lamps	$1.25 each
~~wires~~ Socket & shade	1.50 =

Thos A Edison

6 May - 83

Price 15

Jeno

1883-06-08

The Edison Electric Light Company

65 Fifth Avenue

S. B. Eaton Pres
E. H. Johnson Vice-Pres
E. P. Fabbri Treas
C. Goddard Sec'y

New York June 8th. 1883

Col. George W. Sherman,

City.

Dear Sir:-

I have this moment seen and read for the first time the prospectus of the Argentine Company, dated May 17th., also a memo. handed me by you in connection therewith, to the effect that our Company is to get $200,000 worth of stock (in the company of $500,000) after allowing $100,000 of stock to be sold, and is to place half of this first named amount in escrow, so as to prevent our Company having control of the Company on votes. to draw more than a 50% dividend on the profits

Allow me to say that I have read these papers, the scheme being now presented to me for the first time, and that I cannot give the Company's assent to the matter without first bringing it before our Board of Directors here. I will proceed to do that immediately, if you so desire.

Regarding the legality of your proposed issue of stock, your plan involves a question which I prefer the Board to pass upon

Before presenting the matter to the Board, it will be necessary for me to submit it to Messrs. Fabbri & Chauncey to obtain their views, which I will do to-day.

Very truly yours,

S B Eaton

President.

Form No. 1

CABLE MESSAGE

1883-06-09

THE WESTERN UNION TELEGRAPH COMPANY.

All CABLE MESSAGES received for transmission must be written on the Message Blanks provided by this Company for that purpose, under and subject to the conditions printed thereon, and on the back hereof, which conditions have been agreed to by the sender of the following message.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
105	HM	17	1033

Received at 791 BROADWAY.

Dated Paris June 9 1883.

To Knoside NY

Thos A Edison 65 Fifth Ave

Unengaged Guarantees nothing if Cannot give him two months prepare filing And Cable fortnight before

(E)

To guard against mistakes on the lines of this Company, the sender of every message should order it repeated; that is, telegraphed back from the terminus of said lines to the Originating Office. For such repeating, the sender will be charged in addition, one half the usual tolls of this Company, on that portion of its lines over which such message passes.

This Company will not assume any responsibility in respect to any Message beyond the terminus of its own lines; and it is agreed between the sender of the following Message and this Company, that said Company shall not be liable for mistakes or delays in transmission or delivery, or for non-delivery to the next connecting Telegraph Company, of any unrepeated message, beyond the amount of that portion of the charge which may or shall accrue to this Company out of the amount received from the sender for this, and the other companies, by whose lines such message may pass to reach its destination; and that this Company shall not be liable for mistakes in the transmission or delivery, or for non-delivery to the next connecting Telegraph Company, of any repeated message, beyond fifty times the extra sum received by this Company from the sender for repeating such message over its own lines; and that this Company shall not be liable in any case for delays arising from interruptions in the workings of its lines, nor for errors in cipher or obscure messages. And this Company is hereby made the agent of the sender, without liability, to forward any message over the lines of any other company to reach its destination.

This Company is not to be liable for damages in any case, where the claim is not presented in writing, within thirty days after the sending of the message.

PAID UNDER

4.

June 9/13

Chas. B. Alexander

Driving around

Committee nothing

if cannot get

him, too anxious

people filing & cable

Transport Report

[FROM WILLIS N STUART]

Form No. 2

1883-06-26

CABLE MESSAGE.

THE WESTERN UNION TELEGRAPH COMPANY.

All CABLE MESSAGES received for transmission must be written on the Message Blanks provided by this Company for that purpose, under and subject to the conditions printed thereon, and on the back hereof, which conditions have been agreed to by the sender of the following message.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
334	McM	H	Santiago

Received at 884 Broadway 1442 June 26 1888.

To Edison

New York

63 5 ave Ny

Annex Sprenter

500 10 Cp lamps

ask Mr Upton Central

what Sandy Hook Station

orders same for 10 CP

(No. 26)

ANSWERED 4/7/83

THE EDISON ELECTRIC LIGHT COMPANY, LIMITED.

GREAT MARLBOROUGH STREET M^T TER.

3RD JULY, 1883.

COPY.

MESSRS THE EDISON ELECTRIC LIGHT CO.,

LONDON.

GENTLEMEN,

ENCLOSED I BEG TO HAND TRANSLATIONS OF LETTERS RECEIVED FROM A CORRESPONDENT ABROAD TOGE--THER WITH PARTICULARS RELATING TO A CONCESSION FROM THE GOVERNMENT OF A SOUTH AMERICAN REPUBLIC, FOR THE PURPOSE OF LIGHTING THE CAPITAL WITH ELECTRICITY AND ALSO A PLAN OF THE CAPITAL.

I SHALL BE OBLIGED BY YOUR PERUSING THE SAME AND FURNISHING ME WITH YOUR SPECIFICATION AND ESTIMATE FOR LIGHTING AT YOUR EARLIEST CONVE--NIENCE.

I AM, YOURS TRULY,

SIGNED L. A. CAMPBELL.

[ENCLOSURE]

TELEGRAPHIC ADDRESS
MARLBORO'
MANCHESTER.

L. A. CAMPBELL,
GREAT MARLBOROUGH STREET.
MANCHESTER.

Confidential.

26th March 1889.

L. A. Campbell Esq.,
London. E.C.

Dear Sir,

I have the pleasure to hand you herewith a printed copy of the Contract entered into with the Supreme Government, for the lighting by Electricity of the principal towns in this Republic, as well as for the application of Electricity to industrial purposes. This Contract concedes to us the exclusive privilege of supplying, for 15 years, Electric lighting both for Public and private purposes.

The fixed Rentals to be paid by the Government, quarterly in advance, is $31,000 for the City of ——— alone, and the other towns in the Republic are to be let under the same conditions and terms.

We have already entered into agreements with private individuals for about $6000 a year, and I am quite certain that in a very short time the annual income from lighting private buildings and sugar-cane estates, will reach $15,000 yearly, so that the Company calculate on a minimum, yearly income of $45,000, which will be increased, by the extension of the Electric light to other towns of importance.

I also enclose plan of this Capital, to better explain the details, which I am about to give you, in order that you may

(over

[ENCLOSURE]

TELEGRAPHIC ADDRESS
MARLBORO'
MANCHESTER.

L.A. CAMPBELL,
GREAT MARLBOROUGH STREET,
MANCHESTER.

(as you were good enough to undertake) obtain estimates from the different Electric lighting Companies in London, for a lighting Company or Establishment for the City of ———, or proposals for the purchase of the lighting [illegible]

1st The lighting strength contracted for with the Supreme Government is to be that of 10,000 lights, [illegible] [illegible] the whole compass of the City is to be lighted, as well as the public buildings, theatres, barracks & squares. To this strength must be added the lights required for private houses, say, for the present, 2000 lights more.

2nd The principal area which is to be [illegible] better lighted, is that which comprises the twelve avenues from North to South, and the seventeen transverse streets from East to West, there remaining to be lighted a district which marked on the plan as well as a street also marked on the plan, and about 1,500 yards longitude. The maximum longitude of the avenues is 2,400 yards, and that of the streets 1,800 yards.

3rd At a distance of about 4,500 yards from the City on the North side, there is a current of [illegible] very easy to dam up, and to which a sufficient fall could be given to increase its power. The actual body of water produced is four [illegible] metres per minute.

[ENCLOSURE]

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MANCHESTER.

L. & CAMPBELL,
GREAT MARLBOROUGH STREET,
MANCHESTER.

At 6,000 metres on the East side there is another Turbine quarter, which produces a volume or body, four times larger than the one above described, on which presents some difficulties and would be very expensive to place in an efficient or economical condition. In the meantime Hydraulic power available not being sufficient, the Company would have to supplement it by steam power.

4th Although the Contract requires that the distribution of the light is to be in a focus equal to 36 lights each, which would increase the number of lights necessary for the lighting of the streets, squares and public buildings by 200 more or less, it appears more easily & cheaply, and a different distribution of the lighting would be accepted, provided that while it was more economical to the Company, the result would be equally satisfactory in its results to the consumer. This is a matter of detail which could easily be determined by our Electrical Engineer, on view of the plan of the City.

5th The Electrical Current is to be conveyed by means of wires on wooden posts, which should be placed at the sides of the street or iron arms which projected from the walls of the houses.

6th The period during which the lights are to be lit might be calculated at an average of 10 hours daily, for twenty days in

[ENCLOSURE]

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L.A. CAMPBELL,
GREAT MARLBOROUGH STREET,
MANCHESTER.

the month, or on moonlight nights, no lights would be necessary even for the public buildings.

7th For lighting private houses the force necessary would ~~be~~ not exceed a power of from 4 to 16 lights each.

In view of the foregoing data I should like to know:

1st The Cost of the Water that would be necessary to give the necessary motive power.

2nd In the event of the Hydraulic power available not being sufficient, what would be the Cost of the steam power necessary to complete the power required.

3rd The Cost of the lamps, wires, insulators &c, as per paragraphs 3 & 4 above mentioned.

4th The Cost of the producing machinery &c necessary.

5th General plan of the lighting force which the contracting Company may think necessary.

6th Cost per hour and per force of the lights fixed, being

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MANCHESTER.

L. A. CAMPBELL,
GREAT MARLBOROUGH STREET,
MANCHESTER.

No. 1

All preliminary and other costs of orders, patents, &c. pertaining to an Act to be borne.

2nd. Explanation, in more detail, of particulars of the system of lighting, proposed to be adopted, including full description of lamps, apparatus and machinery, system of installation &c.

In addition to my general idea, as though I have also to purchase everything necessary for my own account, I should like to know if any Company would engage to come here and carry out the contract for lighting both public & private, handing over everything to me in a perfectly satisfactory and working condition, and at what cost the Company would contract to do the whole business, it being understood that on signing the Contract, I would deposit with you, at least one-half of the value of the Contract money, and the other half on my receiving over everything to my entire satisfaction.

Although I consider this a very good business and with a brilliant future, I should have no objection to accepting a proposal for the sale of the Concession, provided it were for a sum which would be worth while accepting, and I would

[ENCLOSURE]

TELEGRAPHIC ADDRESS
MARLBORO'
MANCHESTER.

L. A. CAMPBELL,
GREAT MARLBOROUGH STREET,
MANCHESTER.

1

I would now take a share in the Company purchasing the Concession, assisting the Company here in every way I could, and helping the Government of Guayaquil.

I am assured you that in a few months time it would be by which, according to the explanation given me, the purpose of a company would be for, that the way, would be to establish lighting which, generally speaking Gas lighting, and would be changed into Electric [illegible] [illegible] in the end would result. [illegible] to say that it would be most advantageous, however, it would provide a sufficient amount of Electricity during the day for the night consumption, and thus the heavy expense would have to be for night labour.

Please inquire into this and advise me fully in your next of your investigations.

As the time in which it has been arranged to carry out the Contract is short, and in order that no time should take place, I am trying to arrange everything connected with it, in by means of correspondence, I have requested my Brother, to arrange with you on his behalf in regard to everything required. He will, on the same, bring with him estimates and proposals from Francis Jennings, in this by way to compare and thus most advantageous

[ENCLOSURE]

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MANCHESTER.

L. A. CAMPBELL.
GREAT MARLBOROUGH STREET,
MANCHESTER.

Transitional.

12th April 1883.

L. A. Campbell Esq.
London. EC.

Dear Sir,

I enclose my book of the 26th ult., which contained all the details which I then had for the Electric Lighting of this our Capital.

Having since concluded the inquiries which were being made to ascertain the exact power of water, upon which we might safely now be to rely for the result as follows,

1. Distance from the tower — 3500 metres.
2. Volume of water — 671 litres per second.
3. Fall — 10 metres.

As I presume that the said power will not be sufficient to work the whole of the necessary machinery for the Public & private illumination, I have determined to construct a large tank or reservoir, wherein to collect during 14 hours (not required for the light) all the water which may be available at the rate of 671 litres per second — viz 33,512,800 litres, and which would be 24,120,000 litres per day — during the working hours would give a grand total of 57,632,800 or 1600 litres per second, equal to about 265 à 270 H.P. impinging turbines, or 150 H.P. of a water wheel to be employed.

I give you these details because they may help you

[ENCLOSURE]

TELEGRAPHIC ADDRESS
MARLBORO'
MANCHESTER.

L. A. CAMPBELL,
GREAT MARLBOROUGH STREET,
MANCHESTER.

in forming a more correct estimate which as you know is of great interest to me.

Yours truly,

L. A. Campbell Esqr.

London, E.C.

Dear Sir,

In my letter to you advising you of my due [illegible] the concession for lighting the towns of [illegible] by electricity, I omitted to point out how the purchaser would have to be [illegible] the former Naphtha lighting Co with all its lamps & accessories and the stock of mineral oil representing a value equal to £2,000 paid to the Government, and to the supplier of the naphtha in San Francisco.

I have also deposited in the Treasury here the £5,000 deposit money required by the Contract, which amount will be returned when the Contractor has imported machinery and other accessories to the amount of double the value of the deposit money.

[ENCLOSURE]

TELEGRAPHIC ADDRESS
MARLBORO',
MANCHESTER.

1

L.A. CAMPBELL,
GREAT MARLBOROUGH STREET,
MANCHESTER.

Translation.

Contract entered into with the Company formed by Messrs. _____ for the establishment of Electric Lighting in the Capital of the Republic.

The Secretary of State for War, duly authorised, and the _____ Company formed by Messrs. _____, have entered into the following Contract for the purpose of establishing Electric lighting in _____.

1. Messrs. _____ engage themselves to establish, within the term of one year from the date of this Contract, Electric lighting in the Capital of _____, upon the system of incandescent, open air lights, of the most suitable modern pattern.

2. The area to be lighted in this Capital will be the same as that which is, this day, lighted by the means of petroleum, and the light must be of 10,000 Carcel lights power, distributed at such points as the Government may determine, in focuses equivalent to 36 Carcel lights each. When the Government decides to extend the area of the lighting, the Company will be obliged to effect the same on the same terms and conditions as stated in the Contract. The Company will also supply the number of lights necessary for the use of the Public buildings, free of all charge to the Government.

3. The Contractor shall receive and the Government bind themselves to pay, every three months, when the lighting taxes become due, the sum of $31,000 per annum, for the supply of lights in the streets, squares and public promenades.

[ENCLOSURE]

TELEGRAPHIC ADDRESS
MARLBORO'
MANCHESTER.

10.

L. A. CAMPBELL,
GREAT MARLBOROUGH STREET,
MANCHESTER.

4. The driving engines must be of the Compound system and be worked by steam or equivalent water power, at all events of the most advantageous system and such as would offer the greatest security and economy in the working, and must be provided with a sufficient number of large reserve engines, the which may be required in the Capital.

5. The moving of an shaft consists of 3 engines of 20 horse-power each, and must be so made, that one of them remain always in reserve in the work shop. When the Company extends their supply to the use of private people, they will be obliged to increase the power of their machinery in due proportion, by improving or increasing their number.

6. Each engine must work the requisite number of Electro-Magnetic apparatuses, which produce the current, the force of which will be from 2000 to 2500 Carcel lights in each section and in these latter there will be a determinate or indefinite "succession" (gradually increasing number). The Electric power will be used by of many consumers.

7. The Company is responsible for any damage which may exist from accident in the current of the Electric power, which may happen to occurred with greater mentioned.

8. When the Government may consider it convenient, the electric lighting would be extended to the most important towns of the Republic, on the same terms, relatively,

Co

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MANCHESTER.

L. A. CAMPBELL,
GREAT MARLBOROUGH STREET,
MANCHESTER.

[illegible] of [illegible] to the Contract.

9. The portion of land on the authorised building [illegible] on the [illegible] shall be on account of the Company.

10. The district telegraphs and telephones issued by the Government [illegible] may be used by the Company without any payment to the service, and [illegible] the Clerks employed on the Tests.

11. The Company have the right of contracting with private [illegible] for the use of their lines and [illegible] in their [illegible], and to connect, during the term of this Contract, with any such wires for this purpose to the premises of any other Company.

12. The Company have also the right to transfer their rights in any manner they think fit upon [illegible] to Government.

13. The duration of this contract will be 15 years, counting from the day on which the lighting will be given to the public.

14. At the end of the said term, the materials belonging to the Electric Light Company, and also their buildings, will become national property, without payment to the Government of [illegible] the Contract [illegible] price which the capital may [illegible] to be considered of the Government and the [illegible] Company. In case of damage not [illegible] the [illegible] will be considered the price of the indemnity.

[illegible] the [illegible] contract I [illegible]

[ENCLOSURE]

TELEGRAPHIC ADDRESS
MARLBORO'
MANCHESTER.

11.

L.A. CAMPBELL,
GREAT MARLBOROUGH STREET,
MANCHESTER.

[illegible] the contract will become void and the Company [illegible] pay the sum of £[illegible] as a fine.

16. The non-fulfilment of any of the terms stipulated under the Company's Agreement [illegible] not less than £[illegible] and not exceeding £[illegible] shall be imposed by the General Post Office authorities, and paid to the Government [illegible] of the amount [illegible] per 14 days [illegible] will be cancelled and the Government will take possession of the property of the Company under the same conditions as stated in paragraph 11 [illegible]. [illegible] the Company [illegible] be entitled to claim for the major [illegible] [illegible] 14 days [illegible] all sums be recorded as contract will become void in the same manner as stated under the preceding paragraph.

17. The sums so paid, as stated in which £[illegible], must be deposited upon signing this Contract with the Government Treasury and can be returned to the Company when they have erected machinery and plant for the Cable Cutting, for double the value of the deposit. The Company can then import the plant free of duty.

18. The Company also [illegible] the provision of the [illegible] buoy posts and other requisites of the present Contract

[ENCLOSURE]

TELEGRAPHIC ADDRESS
MARLBORO'
MANCHESTER.

L.A. CAMPBELL,
GREAT MARLBOROUGH STREET
MANCHESTER.

[illegible] Clock, [illegible] of [illegible] to [illegible] the [illegible] [illegible] [illegible] from San Francisco.

[illegible] Company [illegible] for itself [illegible] the maintenance [illegible] the actual lighting expense, under the same terms and [illegible] specified for lighting by electricity, until [illegible] establishment of the electric lighting.

10. Thirdly it is agreed that all differences, doubts and difficulties which may arise between the Government and the Company, shall be settled by amicable arbitration, to be nominated [illegible] by each party.

In witness thereof the Contracts are signed on [illegible] of the same hour and date. 10th March 1882.

[illegible] C.S.
signed [illegible]
signed [illegible]

Approval of the preceding Contract.

The Special Committee finding the preceding Contract in conformity with the instructions given [illegible] Board to the Chairman, for the purpose of approving the same [illegible] and [illegible] the Establishment of Electric Light in the Capital [illegible] his approval to the [illegible] which the Company [illegible] to be communicated. [illegible]

1883-07-14

N.Y. July 14th 1883.

Mr T. A. Edison

Dear Sir

I am requested by Col P. H. Sherman to enclose you this letter received by him from Buenos Ayres. Col Sherman is quite sick and intends going to the Hospital until he is well enough to attend to business.

The plans sent for will be forwarded by next mail from Buenos Ayres.

Col Sherman is now at Smith & McNeill's Hotel at Greenwich & Vesey sts.

Respfly

J M Callum

1883-07-26

Form L.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

New York, ... 188

Major

I want to write a letter to a lawyer in Buenos Ayres giving him power of attorney in my name to apply for permission from the Municipality to lay tube in the streets (all) of Buenos Ayres the distribution of E. for light H.P. I dont know how to do it Can you help me out

Edison

6

July 26th/23

T. A. Edison to S.B.E.

re- desiring to get

Power of Atty for

lawyer in Buenos

Aires & S.B.E.

Reply to Dance

1883-07-26

July 26- 83-

Mr T. A. Edison

Dear Sir

The Guatamala Consul General will arrive here on Wednesday next and then give you all information in regard to those Contracts.

I have been around to several places today, but cant get any further information in regard to it.

Yours truly

Geo. S. Norman

MEMORANDUM.

Saml Insull Esq.
65 Fifth Ave
New York.

OFFICE OF
Western Electric Company,
62–68 New Church Street,
P. O. Box 1745. New York.

Aug 7, 1883

Dear Sir,— Kindly return to us the letter from Mr J Wells regarding Australian royalties left with you by the writer. We showed Gen Edward to have your reply for Mr Edison, to our tender of the royalties for the 1882, in accordance with the agreement between us and Mr Edison

Yours truly Western Electric Co. C. A. Brown

1883-08-16

Edison Electric Light Co.

(Stenographic)

Boston, August 16th, 1883.

Thos. A. Edison, Esq.

New York City.

Dear Sir,-

Mr. E. L. Holbrook, the gentleman who is going out to China, to set up machinery in the Shanghai Cotton Mill, came in here yesterday for the first time. I find he does not expect to take charge of wiring the mill, nor assume any responsibility beyond getting a general knowledge of wiring. He has almost no time to give to this matter before he goes, nor has the other man whom you expected to go with him to the Lockwood Mills turned up yet, and there is no knowing when he will.

Since they must sail so soon, it seems to me a very risky piece of business to have the success of our system, depend upon men of so little experience. I told him yesterday to bring his plans in, and we would lay out the work for him. To-day he came in, and says he finds the plans have gone to China. He cannot give us the arrangment of the machinery, and all he can get for us, is a sketch of the rooms which the pipers have to lay out their work. From the number of looms and spindles, we know that he will need about 275 to 300 lights, if the mill is arranged approximately as American Mills are built.

This information, of course, is entirely worthless when it comes to an attempt at planning the wiring, and in fact, even

1883-08-16

if the two men who are to go, were shown our system, I do not believe that either would be competent to lay out the work and figure the wiring in China.

I see but one way out of this difficulty, and Mr. Holbrook agrees with me, that it is the only way, namely, to select one of our most experienced foremen, post him thoroughly in all the details of figuring, and prepare him for such difficulties as he would be likely to encounter, sending him out to China to set up and start the plant.

What suggestions have you to make as regards this arrangment. I can find such a man in the New England Dept.

Yours very truly,

Spencer Borden, Manager,
N. E. Dept.

[INCOMPLETE]

Santiago, Chile 1

(1883-09-08)

Form 1 W.-1000

THOMAS A. EDISON, PRESIDENT,
SAMUEL INSULL, SECRETARY & TREAS.

Stewart's Machine

EDISON MACHINE WORKS,
OFFICE, 65 FIFTH AVENUE, (ROOM 17,)

WORKS,
104 GOERCK ST.

New York, ... 188

Send them map Tiffin, Newburgh Piqua,
Have Gramari's Explain how he is to canvass for the
private lighting - also to arrange the Exact
position of the street lighting, which Experience
has shown that a 32 C power Lamp at
the + of the 2 streets is the best -
to send all the data thus obtained here -
also about cost wood coal, cost of poles
give sizes & lengths = Send him plan
of bldg & arrangement of machinery at
Piqua Newburg & Tiffin -

~~Send~~ give price FOB Nyork for all the
apparatus for a 500 800 1000 1600
3200 Light plant Except the wire in
the streets & insulators, and supplies of
wire for the interior lighting with fixtures
This we can obtain from the Canvasser send.
but we cared strike it near if he sent the
Gas lighted interior & also the area &

[INCOMPLETE]

Santiago Chile 2

(1883-09-08)

Form 1 W.-1000-3-18-'84.

THOMAS A. EDISON, PRESIDENT,
SAMUEL INSULL, SECRETARY & TREAS.

EDISON MACHINE WORKS,
OFFICE, 65 FIFTH AVENUE, (ROOM 17,)

WORKS,
104 GOERCK ST.

New York, ... 188

number of lights for street lighting –
the street lighting is done on seperate
circuit so all the estimate sent
will not include the plant for street
lighting the cost of this will
be very little extra except the cost
of the street mains, We can
send experts to erect ~~[illegible]~~
put the machinery going, for about
_____ fare there & back –

He would have to supply all ordinary
labor erect bldg poles etc

12 pct + 25 pct FOB
15 pct to him
he charges what he likes

Isolated Biz

give him sizes dynamos Bergmann Catalogue
+ arrange on same basis as Stewart,

1883-09-26

A. W. DANFORTH,
Manager.

CHING TAUCHAI,
Commissioner.

SHANGHAI COTTON CLOTH MILL COMPANY,

Shanghai, China Sept 26th 1883.

Thos. A. Edison Esq.
#65 Fifth Avenue
New York N.Y. U.S.A.

Dear Sir:

Your esteemed favor of the 8th August is duly at hand. I cannot express to you how thankful I am at its contents. For many reasons I wanted it to come from America and had I known that you could have furnished it I should have remained in America longer and attended to the affairs myself which I have felt obliged to leave to you and Mr Kellogg. I am very sorry to put you to so much trouble and very grateful for your prompt and kind attention. I shall send you a set of plans from here as soon as I can settle upon everything. I cannot possibly get the mill ready for your lights till next autumn so there will be plenty of time. I thought that they had the mill begun but find they have done nothing. A company is working the "Brush" light for the streets here but it is very unsatisfactory. Yours very truly A. W. Danforth
Manager S.C.C.M.Co.

Reply

1883-10-82

Tell Sherman that we could not take this contract we could only take it for that portion of the city which is in our station & we would have been obliged to do the lighting of the municipal lights & we would not be even with our station lighting

New York Oct 2nd 1883.

Mr Thomas A Edison

Broclon Mass.

Dear Sir

You will find enclosed an advertisement inserted in the New York Herald by Mr Carranza, asking for Proposals for lighting the streets of the City of Buenos Ayres. I call your attention to it, and Mr Carranza joins with me in considering it just the opportunity that the Edison Argentine Electric Light Co should secure without delay. With this in view Mr Carranza and others will take the balance of the shares.

Please give this matter serious consideration, and be prepared to take immediate action on your return.

Yours Very Truly

Geo H. Sherman

1883-10-13

Major Eaton,

I enclose you herewith letter received by Mr. Edison from Mr. Ladd.

We have written him stating that we have referred the letter to you, as we believe the Light Co. has a contract in Mexico. We have also told Mr. Ladd that he will doubtless hear from you on the subject.

S. Insull,

October 13th. 1883. per G.

H

Dear Major Eaton
Letter from Ladd
Yours

[ENCLOSURE]

1883-10-03

Subject): City of Mexico.:-

OFFICE OF THE
EDISON ELECTRIC LIGHT,
No 222 SANSOME ST.

GEO. S. LADD.

San Francisco, October 3 1883. 188

In reply to yours
No.

Thomas A. Edison, Esq.,

New York.

Dear Sir:-

Hon. Ramauldo Pacheco, ex-Governor and Congressman of California, leaves tomorrow for the City of Mexico and will visit New York in December. I have given him letters to Major Eaton and yourself.

The Mayor of the City of Mexico has requested him to recommend the best system of electric lighting for that City, as they desire to adopt one within three or four months. There is already an Arc lighting company [redacted] in the City, but the Governor does not know which system it is. I think he will be strongly influenced by my recommendation of the Edison incandescent.

Please write to him immediately at the San Carlos Hotel, City of Mexico, telling him whether you can deal directly with him, or referring him to your licensee or other representatives there, if you have any. Give him all the information possible and send him any printed matter which may be of use.

The Pacheco's are ~~permanently~~ preeminently the leading native Californian family, and the Governor is the head of the family. Their high

[ENCLOSURE]

1883-10-03

connectons amongthe ruling families of Mexico and his high political and social standing in this country, gives him a position among the official people at Mexico which should be very valuable in this connection.

Hoping something may come of it, I am,

Very truly yours,

Geo. S. Ladd

-: Duplicate to Major Eaton.:-

FROM

THE TIME TELEGRAPH COMPANY

Temple Court,
5 BEEKMAN ST.

MEMORANDUM. 1883-11-09

New York, Novem'r 9th 1883

To J. M. Gate
65 Fifth Ave

Will you kindly send me by bearer the South American Estimates which I have just learned by telephone are ready

Yours truly
C. Gouraud

6

Nov 9/83

G. Bidgood
re Col. Sherman
& The Argentine
Co

1883-11-09

~~1 & 6 Wall St~~
New York Nov. 9/83

Thos. A. Edison Esqre
No. 65 5th ave.

Dear Sir

As you are aware Colonel Sherman expressed himself as expecting to receive the Argentine papers by or about the 26th ult. I saw the Colonel just prior to the 1st instant and urged upon him the advisability of dispatch in the matter. Since then I have heard nothing from him. My friend states that he is ready with the necessary Capital at any time on the presentation of satisfactory papers. Will you kindly favor me with a line informing me just how the matter stands at present, and much oblige

Yours truly
Geo. Bidgood

I have to depend on Sherman
The rights are a humbug anyway

There is no trouble in getting municipal franchises in any

FROM

THE TIME TELEGRAPH COMPANY

Temple Court,
5 BEEKMAN ST.

MEMORANDUM. 1883-11-23

New York, Nov 23 1883

P. Insull Esq

Dear Insull

I did not get that estimate last night - Cannot you send it by Beaver I leave this P.M.

Yours
C Goodard
Estimate for San Josie de Guatemala

1883-12-01

A. B. CHANDLER,
President.

H. SEYMOUR GEARY,
Vice-Prest. and Treasurer.

THE FULLER ELECTRICAL CO.,

OFFICE, No. 44 EAST 14TH STREET,

Wheeler & Wilson Building, Union Square.

☞Address all Correspondence to "The Fuller Electrical Company."

NEW YORK, Dec. 1, 1883.

Friend Edison:-

A. J. Brown, W. U. foreman of construction in this city, and W. C. Smith, foreman here for the Rapid Company, are hard working, pushing, and capable men in telegraph service. Whether they would suit your service or not, could only be ascertained by trying. Neither of them wears so large a hat as you mention, and I doubt whether either of them ever heard of Plato. I don't know whether either of them wants to leave his present place. If I should learn of any other who would be likely to suit you, I will send him to you for "inspection."

Your's,

A. B. Chandler

1883-12-01

A. B. CHANDLER, President.

H. SEYMOUR GEARY, Vice-Prest. and Treasurer.

THE FULLER ELECTRICAL CO.,

OFFICE, No. 44 EAST 14TH STREET.

Wheeler & Wilson Building, Union Square.

☞ Address all Correspondence to "The Fuller Electrical Company."

NEW YORK, Dec 1, 1883.

Dear Edison:—

Col. G. W. Sherman applies to us for business connections with us in the Argentine republic,—not to interfere with yours.—

He seems a "queer dick" and yet to possess some real merit.— May I ask what you know of him?—

Yours Chandler

~~Referred to Mr Fay~~

Ref'd to Sherman

From

THE TIME TELEGRAPH COMPANY

Temple Court,
5 BEEKMAN ST.

MEMORANDUM. 1883-12-08

New York, Dec 8 1883

To I Insull Esq

N Y

My dear Insull What has become of the revised estimate for Guatemala? I hear you are going away Tuesday & as I am going to Boston Sunday night I fear I may not see you before you leave. wont you either send it to me here or leave such instructions with McIsit that I may get the figures through him on my return - I have been chasing you round by telephone but have not been able to catch you. If I don't see you I wish you a pleasant voyage & a good time Yours C Gaillard

[INCOMPLETE]

Organize say the Mexican Electric Light Co, with Capital of _____ dollars;

Elective officers and appoint a technical Manager of some business Capacity who cannot Come to N York =

Obtain a Contract from the Light Co here, whereby all rights & patents are to be assigned over to the Mexican Company with future improvements

[INCOMPLETE]

2

This can probably be obtained for 25 pct of the Capital of the Mexican Co or 25 pct of the Capital of each individual Company - of this 25 percent 1/5 is cash -

Edison will ~~contract for each individual City or Town~~ make itemized tenders for complete installation of any town or City - terms 25 percent Cash down 50 percent after Installation is completed & ready to supply light & 25 percent when the

[INCOMPLETE]

4

after two or more of the smaller towns have been installed & are found to work satisfactorily both financially & technically it

Notes -

Edison will ask Electric Light Co here for a form of Contract which they will give

On closing contract Edison will send a man to Ojacca to go over the town to obtain data to Estimate within 12 days after receiving data

[INCOMPLETE]

will send to Mexican Co.
tender to install the system,
financial arrangements being
made through house in N.Y.
will send man & machinery
~~with~~ probably within 30 days
after contract signed —

~~=USA co~~

All small plants for
Cotton Mills, Estates
etc, to be sold to
Mexican Co. at same
price as to Coo in USA.
I think about ~~1.800.000.~~ 2 million can be
invested in whole of Mexico
that will ~~return~~ give very great returns,

Mr. Israel Thebaud Bros, 64 Broad St City, have a friend in Porto Plato on the Island of Santo Domingo who wants information — This is an independent island, & therefore not in the control of Fabbri & Chauncey or the Spanish Colonies — I promised Mr Thebaud I would ask you to send him the approximate cost of a 60 light installation with an engine & one without engine. He wants

Hastings

the information as early tomorrow morning as possible. — (Tuesday) I have an engagement with Mr Vanderbilt & shall be here till late. —

Yours

Hastings

Monday Eve

[MEMORANDUM BY WILLIAM H. MEADOWCROFT]

No. 2 - To acquire the Patents ~~of~~ granted to Thomas A Edison by the Argentine Republic, for his inventions relating to electric lighting and generating, regulating & applying electrical currents in an electric lighting circuit for producing light, heat and power; and to manufacture erect, maintain or sell ~~[illegible]~~ ~~license others so to~~ ~~electric~~ apparatus for electric lighting, heating or power in said Argentine Republic; and to license others so to do.

(1883)

[MEMORANDUM BY CHARLES BATCHELOR]

2 Armington Sims Engines T Bed Plate 3500 427.70 3927.70 (1883) 3927.70

4 Regulators. 1100.00

5027.70

7976.33
5027.70
2948.63

Cable Three thousand dollars amount account less four regulators and two Armingtons. Also arrange payment here camps on shipment

Material as called for in Estimate from Edison and Swan (1883) United Light Co. for Sugar House in Demarara British Guiana

One 100 (16cp) light Dynamo	725		1631	
One Pressure Indicator	50		55	
One Resistance Box	100		110	
Wire in assorted sizes for 100 lamps	96	70	106	37
Switches	41		45	10
Cleats	1	80	1	98
Cut outs	9	60	10	56
80 Polished brass sockets without Key	38	80	42	68
20 " " " with Key	18		19	80
100 lamps (16cp)	40		100	
Tape screws etc.	10		11	
Mounting	20		22	
	1150	90	2155	49

1883. Electric Light - Foreign - Europe (D-83-037)

This folder contains correspondence, agreements, articles of incorporation, and other documents relating to the establishment of Edison electric light companies in Europe. Much of the correspondence is by Joshua F. Bailey, Edison's agent in Europe, and by Charles Batchelor, who was in France as Edison's personal representative. Some of the correspondence is in the form of cable messages to and from "Heraclite", a code name used by Bailey. Other cable messages are addressed to "Eknoside New York", a code used by Batchelor for messages to Edison. Related material can be found in D-83-031 (Electric Light - Edison Electric Light Company of Europe, Ltd.) and in the Primary Printed Collection (Company Records Series).

Approximately 90 percent of the documents have been filmed. The following categories of documents have not been filmed: routine correspondence relating to accounts, orders, and shipments of goods; shipping instructions, bills of lading, and other routine documents concerning orders and shipments; routine foreign-language documents lacking English translations; duplicate copies of selected documents; copies of cable messages filmed in Letterbooks, LM-001 and LM-002 (Letterbook Series).

Cie CONTINENTALE EDISON
SOCIÉTÉ ANONYME
Au Capital de 1 million de francs
EXPOSITION INTERNATIONALE D'ÉLECTRICITÉ
Paris 1881
GRAND DIPLOME D'HONNEUR
ADRESSE TÉLÉGRAPHIQUE
EDISON, PARIS

83

answered Jan 16

33 Avenue de l'Opera, Paris,

2nd. January, 1883.

We can make a 100 or 150 Candle Lamp. The color of the light coming from one of the inch 1/2 - Da Faure batteries would probably answer

T.A.Edison Esq.

65 Fifth Avenue, New York.

Dear Sir:

We have just received a visit from an Officer in the French Army who is in charge of Optical Telegraphy. They wish to have a light which is intense and also in small compass, and he had the idea that your lamp would serve them.

light would require 2600 ft lbs per ~~hour~~ minute.

He says that they cannot well have a greater weight than 50 kilos to transport, and this weight ought to be as compactly disposed as possible, and, of course, not exposed to accident from transport, and from the conditions in which it would be necessary to use it. Can you make any suggestion that would be useful in this direction, whether relating to a special form of battery or to special dispositions of any sort whatever?

The name of the gentleman who called is Captain Louis De Place of the School of Application of Cavalry, Namur, and you will please mention this name and address in your reply, so that the matter may not be overlooked.

Your answer will oblige,

Very truly yours,

SOCIÉTÉ ÉLECTRIQUE EDISON

J. D. Place

Administrateur délégué

1883-01-06

C^IE CONTINENTALE EDISON
SOCIÉTÉ ANONYME
Au Capital de Trois Millions de francs
EXPOSITION INTERNATIONALE D'ÉLECTRICITÉ
Paris 1881
GRAND DIPLOME D'HONNEUR
ADRESSE TÉLÉGRAPHIQUE
EDISON, PARIS

33 Avenue de l'Opera, Paris,

6th. January, 1883.

T.A.Edison Esq.

65 Fifth Avenue, New York.

Dear Sir:

The following is a translation of a letter we have received this day as to the additional credit of $10,000 required by you from the Italian people. Please let us know at the earliest possible moment what reply we should make to this communication.

(COPY.)

Milan, 4th. January, 1883.

"To the Compagnie Continentale Edison, Paris.

"Gentlemen:

"We are in receipt of your favours of the 28th. and "30th. December as well as of your two telegrams of later date in-"forming us of Mr. Edison's demand of a new credit of $10,000.

"We must admit that we have been very much surprised at this "new demand, the more so as you had announced to us in your telegram "of the 10th. December that the new credit of $16,000 would be suf-"ficient for the balance due Mr. Edison. In fact that despatch infor-"med us that "Edison asked urgence for a fresh credit of $16,000 in "full of order." We opened the credit thus asked for and thought "all was in order, when here you write us again on December 28th.

1883-01-06

"saying that the material sent surpasses the credits opened by $4973.
"23, and your telegram of the 1st. instant raises this figure to
"$10,000. "

"We do not know whether it is you who made a mistake in
"your despatch of 10th. December, or if it is Mr. Edison who makes
"a mistake in asking for this new credit; but we cannot conceal from
"you that the Milan Station costs a great deal more than the first
"estimates led us to expect. For the moment therefore we do not
"see our way to open a new credit, especially as we have not receiv-
"ed up to this time but a very small part of the whole of the mate-
"rial ordered, and that having already authorized the payment of
"nine-tenths of the price, we consider that we have a right to re-
"tain a small balance which will be paid after receipt and verifica-
"tion of all the material, as is the custom in all enterprises of
"this kind.

"You inform us also that Mr. Edison is going to send us at
"the beginning of February the new Armington & Sims engines. We
"thank you for your good services in this matter; but is this the
"reason for the new credit of $10,000? We can hardly suppose so;
"for from the moment that the Porter Allen engines have been pro-
"tested by Mr. Edison and their payment suspended by him(and he has
"already had two of these engines removed from the Central Station
"at New York, as a letter received by Mr. Lieb yesterday announces)
"we also have the right to protest them, as we now formally do, and
"we have also the right to receive the new engines without paying a

"single denier, Mr. Edison being wholly responsible vis-a-vis with us, "who entered into no agreement with the Porter Allen people, for the "good quality of the material that is delivered to us. We should "even have the right to demand repayment of the whole cost of trans-"port, custom dues, &c. which we have been obliged to pay for the "present engines, which will be of no use to us, and which are placed "at your disposition.

"If it is only a matter of a small amount you can arrange "it by debiting our account with you, and we will arrange it after "receipt and verification of the whole of the material; it being "well understood, however, that we shall only accept the material "ordered by us. As to the new engines we understand that they will "be delivered to us free of charge, considering that we have already "done too much in charging ourselves with the expenses which they "have caused us. You may communicate our intentions in this matter "to Mr. Edison as settled, beleiving that you cannot doubt their per-"fect justice.

Sd.) Comitato per le Applicazioni
dell'Elettricita in Italia
E.Rava. "

Your immediate attention will oblige,

Very truly yours,

COMPAGNIE CONTINENTALE EDISON

Administrateur délégué

1883-01-13

Recd Feb 2nd 1883

Milan
Italy
Jan 13th '83

Thomas A. Edison, Esq.

Dear Sir;

I arrived here Dec. 8th and immediately reported to Prof. Colombo who informed me that it would be some time before it would be possible to accomplish anything toward the internal arrangements of the Central Station. The work has progressed very slowly and at present there is but little prospect of our being able to run any lights from the Station before the first of March. The roof of the Station and the stack have just been

finished otherwise there has been little done with the internal work.
The Brick Dynamo Foundations have been put down but it will be impossible to begin setting up the Dynamos until the Brick arch flooring overhead is finished.
The Boilers and Dynamos are packed up just as they arrived and are still at the Milan Custom house.
Mr. Patterson began laying the Tubes Jan 2nd and it will probably take until the middle of February to finish the street work During the past few days it was impossible to make any progress with that work as it snowed for two days and rained the day following.
None of the buildings have been wired but they will begin to prepare for the wiring next week.
As there was nothing else to do I have prepared working drawings of the internal arrangements of the station in order that when they are ready with the building the work may proceed rapidly.
If there have been any new developments in connection with the taking off of the Current from the "C" Dynamos please let me hear of them.

Very respectfully
John H. Lieb Jr
To G. Colombo
via Manzoni 12 A
Milan Italy.

1883-01-15

Internationale Electrische Ausstellung
Wien 1883.

Directions-Comité:
I., Wallfischgasse 9a.

Wien, the 15th January 1883.

Dear Sir,

In the course of sending off the general invitations for our International Electric Exhibition we likewise addressed one to you.

We, however, cannot forbear inviting you particularly to join our Exhibition for we have been accustomed to find your honourable name connected with all matters respecting Electrotechnic.

In doing this we only pay due respect to him who ranks eminently among the first inventors and improvers in the most important branch of our days.

We trust, dear Sir, you will kindly

Mr. Thomas A. Edison

Menlo Park

New York

seize the opportunity of our Exhibition by displaying some of your latest constructions and thus raise new claims to the admiration which all the world bestows on you.

Hoping you will kindly consider our wish, we remain, dear Sir,

Yours most respectfully
Das Directions-Comité.
Carl Hoff. Jeumbeu

1883-01-19

Société d'Appareillage Electrique.

Genève, le 19 January 1883.

Thomas A. Edison Esq.re
65 fifth Avenue
New York.

Dear Sir

We have the pleasure to inform you that we have this day formed a Company under the name and title "Société d'appareillage électrique,"

Consequently your interest in the profits of the Company begins this 18th day of January 1883.

We have cancelled the contract we had entered into with the "Société Générale del'Industrie du Gaz," dated the 15th September 1880 and which has then been approved by you, it exists no more and we have transferred to the above named Société d'Appareillage électrique all our rights you have conferred on us by your contract dated the 9th Sept. 1880.

As soon as our articles of association are finished and registered we will send you a printed copy. — but we thought best to inform you at once of the fact that we are ready for work. —

We think that you might not let us have your lamps at a lower price than £2.50 as you are our partner in the sale of them and we hope you will make us a concession

Please send us immediately all the models of meters, regulators and other apparatus connected with your system and all the drawings of the large machines and other subjects for which Mr Burnettini has asked.

We need at present the following lamps which please ship by Express to the (fast freight)

Société d'Appareillage électrique
Boulevard du Théâtre No 8.
Switzerland. Geneva

5000	Lamps	8	Candles.
3500	do	16	do
1500	do	32	do

This being the first lot of Lamps bought by the Company; please mention them at a reduced price and inform us at the same time in which way you should prefer to make payments for the lamps, and if it would not be more convenient that you should draw on us for the money. Mr Ch. Burnettini is the chief Engineer of the Company.

Welcome Dearsir
Yours very truly

SOCIÉTÉ
D'APPAREILLAGE ÉLECTRIQUE
LE DIRECTEUR

1883-01-20

Berlin 20 Jany 83

Dear Sir: Mr. Edison:

It will be impossible for me anything decisive about the results with S.I.H. & Gen. Bankers till two or three days later. Your cable about Italian Porters - Armington's was duly rec'd. Colombo writes me today that you say to them that two Armington will regulate and steady two Porters. and asks whether this indicates that you will change two other Porters without charge.

The real question is not whether you could successfully resist a demand on the part of the Italians or not. and if you could the reasons would in my opinion be imperative why you should not. You cable to Colombo that two Armington will answer to correct the Porters suggests to me a compromise that would be the least that you could afford to do: that is to change two of them without expense to them.

There is one phase of the matter that I wish you would write me about: They say "Mr Edison "himself says that he has not paid the second "half on the Porters and that he refuses it. and "condemns the Engines as imperfect & throws them "back on Porter. How is it then that Mr Edison "does not treat us as well as he treats himself.

"and that he allows us to pay him in full,
"on account of our confidence in Mr. Edison, while
"he himself does not pay for his own engines, and
"rejects them"! —— I beg you to believe me that
all questions of right aside, (for I do not know all
the facts,) it will cost you and all of us very
dear if the matter is not treated in such a way
as to leave them satisfied. — There is also
this: that it leaves a very nasty responsibility
on Colombo, who, wholly on his confidence in and
enthusiasm for you went ahead and made these
orders, and purely as a matter of confidence.
I suppose the Porters can be used in single
machine plants, or for isolated plants, so that
they could be utilized, and in any event could be sold
in the states where there is a market, with some
loss. I cannot represent to you too strongly
the advisability of doing as I urge.

Very sincerely yours,
F. R. Bailey

1883-01-22.

Cie CONTINENTALE EDISON
SOCIÉTÉ ANONYME
Au Capital de 1 million de Francs

EXPOSITION INTERNATIONALE D'ÉLECTRICITÉ
Paris 1881
GRAND DIPLOME D'HONNEUR

Paris, le 22nd Janv. 1883
33. Avenue de l'Opéra.

Thomas A. Edison Esq.
New-York.

Dear Sir,

Referring to your favor of Nov. 21st remitting us account for Counsel fees amounting to $144,20 we beg to inform you that we have to-day instructed Mr. Wallenstein to pay your same amount.

We take this opportunity to enclose a translation of an article published by the Berliner Börsen Zeitung on the 29th Dec., please let us know what answer can be made in your name on such cases.

We are, Dear Sir,
Yours very faithfully,
COMPAGNIE CONTINENTALE EDISON
Administrateur délégué

1883-01-23.

1

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

Grand Diplôme d'honneur Paris 1881

Ivry-sur-Seine, le 23rd January 1883.

C. A. Edison Esqre
New York

My dear Edison.

Cable Transfer. Your cable of 20th inst as follows received:
"My bills against adjourn Vautier banquet Bergmann bills mailed eleventh "and twelfth but send cable transfer Beauty Capital both urgently needed funds"
I am notified today by the Bank that they have called you yesterday $ 5000.

C. Dynamo. I believe I wrote you some time ago that there was considerable difference in the distance between the bedplate of the Armington engine and that of Porter. Of course my Armington drawing had no engine on it but if I presumed there was one there, the shaft for the Dynamo which I have now got forged would be, I believe, about 2/32 short so you see I dare not turn up the shafts, and consequently I am at a standstill on the armatures. The other part of the work for 2 of these Dynamos is well along but I cannot do much more with them until you send me a complete scale drawing of the Dynamo coupled with Armington engine; I also cannot cast the bases untill I can dispell this difference in shaft.
It is very important that I should have these quickly as the Société Electrique are concluding a contract for lighting the Grand Opera of

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

Grand Diplôme d'honneur PARIS 1881

Ivry-sur-Seine, le 23 January 1883

2

Paris and want 4 of them immediately; in fact I am afraid that we shall have to give the wire in the contract and, of course, for that I am perfectly at sea.

I wish you would send me an exact recipe for making the gold-plating solution for the C Dynamos in order that I can mount a bath.

Also please send us 2 of the Hurtevant blowers used for the large Dynamos and 2 of the Cylinder-oilers that you use; these I will send you an official order for.

Gare de Strasbourg We have just arranged to furnish a plant of 1200 lamps to this station which is just being built; it is very much spread out and we shall use a large amount of tubing, all of which material except the lamps can easily be furnished from here.

Meters. I must now commence to make meters and it would save me much trouble if you sent me a blueprint of each size you make, as it is much better that we keep that size perfectly uniform.

I shall do nothing in this matter until I have these drawings as the delay in receiving some of the Dynamo drawings occasioned a slight difference in ~~some of these~~ sets and yoke which has caused me a great deal of trouble to rectify.

Bills I wish you would send to the Société Industrielle an accurate statement of everything you have delivered up to the end of year 1882, with amount of cash received, in order that we may get it straightened out

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

Grand Diplôme d'Honneur PARIS 1881

Ivry-sur-Seine. le 23 January 1883

in our books so that our new Book Keeper can understand it; also, in future, send bills immediately, if not before the goods have been sent, and a letter of instructions as to the contents of each package; this is very important for us as we have sometimes to open every single case in a shipment because we have not the list & number of the packages.

Lamp factory. Have just had a "pic-nic" with my mercury pump. I got a new oiler for the shaftings and he kindly oiled the inside of the pump for me although well instructed about it; I do not need to tell you what trouble we had.

Pump glass Our order for pump glass was for glass enough for 5000 pumps, you have only sent enough for 400 or 500; this I ought to have immediately as I cannot work with so few pumps and it is difficult to work 2 glasses at the same time. I wish you would hurry those up for me.

New material for sockets. Thanks for the samples and recipe, I will do some experimenting also on this.

M. Batchelor

~~Enclosure~~

Form No. 3.

CABLE MESSAGE.

THE WESTERN UNION TELEGRAPH COMPANY.

All CABLE MESSAGES received for transmission must be written on the Message Blanks provided by this Company for that purpose, under and subject to the conditions printed thereon, and on the back hereof, which conditions have been agreed to by the sender of the following message.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
179	Kirch	26 Berlin	111

Received at FILED AT 854 BROADWAY.

Janv 1 1888.

To Edison New York

In nichtigkeitsklage swans gegen edisons hauptpatent glaezende gesiegt swan kostenpflichtig abgewiesen under patent durch die gruende unvergleichlich gestaerkt

Edison

[FROM CHARLES BATCHELOR?]

Form No. 8.

CABLE MESSAGE.

THE WESTERN UNION TELEGRAPH COMPANY.

All CABLE MESSAGES received for transmission must be written on the Message Blanks provided by this Company for that purpose, under and subject to the conditions printed thereon, and on the back hereof, which conditions have been agreed to by the sender of the following message.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER 12 | SENT BY Duan | REC'D BY 11 Paris | CHECK 805

FILED AT 854 BROADWAY.

Received at 66 Janv 5 1888.

To Edison Mr
65 Fifth Ave

Division first instance
German Swan suit
Your favor
Edison

1883-01-30

Mr. Edison,

I am in receipt [illegible] to you asking you to send powers of attorney. Mr. Bailey's stenographer has just arrived from Paris, Mr. Lawson. He states that Bailey or somebody else has lost the powers which we sent over a year ago. It is rather curious that Bailey loses so many papers which entail delay in giving us the founders shares. He has lost some papers which he took away from here last Autumn, which I swear I gave him. I have supplied those and made up the loss. Now he has lost these papers. There is something queer about the matter.

I will look into the powers of attorney asked for and then communicate with you again.

S. B. Eaton

Jan. 30th. 1883. per McG.

1883-02-02

Form No. 3.

CABLE MESSAGE.

THE WESTERN UNION TELEGRAPH COMPANY.

All CABLE MESSAGES received for transmission must be written on the Message Blanks provided by this Company for that purpose, under and subject to the conditions printed thereon, and on the back hereof, which conditions have been agreed to by the sender of the following message.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY		CHECK
239	Co	Cm	Zs	Paris

Received at FILED AT 854 BROADWAY. Febr 1 1888.

To Edison N.J.

Just learned Malicious statements made in sell Wait letter will mail Monday before forming opinion or speaking about J. Bailey

1883-02-05

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ELECTRICITÉ

Grand Diplôme d'honneur

PARIS 1881

Ivry-sur-Seine, le

Feb. 5 1883.

Thos A Edison,

Enclosed letter from Seubel explains itself

Very truly yours

Chas Batchelor

[ENCLOSURE]

1883-02-02

Philip Seubel
Ingénieur-Electricien
de la Société Electrique Edison
33 Avenue de l'Opéra
PARIS.

Munich Febr. 2. 1883.

My dear Mr. Batchelor

I am in receipt of your favor of 23 inst. with enclosure. I return the latter with a postal card from the same writer which came into my possession, as the adress indicates, through the hands of a third party. That I owe a small sum of money to my sister is a fact but when I left New-York I did not know where she was & have never, since I am in Europe receiving any news from her. The postal card is the first indication to me that my sister is married and is certainly a queer way to inform me of such a fact as the card in itself has an insulting intent. I dont know the writer and never heard his name and cannot and will not pay any money to a stranger whom I dont owe anything. If my sister will send her adress in her own handwriting, I shall be glad to have an opportunity to dispose of the

[ENCLOSURE]

matter. I return the whole affair to you as I like to have it go back through the same channel through which it came. In justice to myself I wished to have the matter explained to Mr. Edison.

Very truly yours

P. H. Senkel

Georgenstr. 4.

Blank No. 3.

No. 6 H Co. W.

CABLE MESSAGE.

1883-02-08

1035

THE WESTERN UNION TELEGRAPH COMPANY.

All CABLE MESSAGES received for transmission must be written on the Message Blanks provided by this Company for that purpose, under and subject to the conditions printed thereon, and on the back hereof, which conditions have been agreed to by the sender of the following message.

A. R. BREWER, Secretary. NORVIN GREEN, President.

Check.

11 Berlin

Edison NY

65 Fifth Ave.

Received at 791 BROADWAY, Feb 5 1883

Proposals made City Month or Two before Decided

Bailey

D. WALLERSTEIN,
ADDRESS LETTERS TO
Box 2787.

174 WILLIAM STREET.

84
1883-02-08

New York, Feb 8th 1883

D. Wallerstein

S. Insull Esq. City

Dear Sir,

In reply to your favor of this day, would state that I received yesterday a Paris cable concerning an Italian credit, but do not quite understand it, as it is not clearly worded. I therefore cabled last night, and as soon as I have an answer I will let you know. —

Yours truly
D Wallerstein

1883-02-05

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ELECTRICITÉ

Grand Diplôme d'Honneur 4440

PARIS 1881

Ivry-sur-Seine, le Feb. 8 1883.

Thos A Edison Esq New York.

My dear Edison,

There is a very serious fault in your 1st and 2d machines which I presume you have remedied ere now. I find nearly all of them have it. The cap that screws on the commutator to hold the bars tight projects over the end of the body of commutator – This will do no harm as long as the machine turns one way; but if it has to turn the opposite way to which the commutator cap screws up it will tend to unscrew the cap against the bearing, every time the spring on end of shaft lets it touch the bearing –

I notice if we put one of your shafts in lathe to turn a commutator they are frightfully out of truth how is this?

Yours truly

"Batch."

1883-02-11

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ELECTRICITÉ

Grand Diplôme d'Honneur

PARIS 1881

Ivry-sur-Seine, le

5, RUE DU PARC

Feb. 11th 1883.

My dear Edison

You shipment of Electrical material by Amerique Jan 15th an Ferrere same date also on Canada a week later have all been here some time now but ~~we~~ have not been able to get them as yet because you give no entry to show what they contain — It is annoying to have a man a whole week trying to get a permit to unpack the cases to find out what they are — If you will have your people who pack do this it will save us an immense amount of trouble — Mark every case CB 1, CB 2, CB 3, and so on then send me a letter saying that Case CB 1 contains so and so
CB 2 " " " "
then I entify the Custom house that they will find these things in the cases; they probably open one and find it right and there is no delay at all

Yours "Batch" —

1883-02-13

February 16th.

Je declare, que la Societe d'Appareillage Electrique de Geneve et les Societes qui en dependent ont seules le droit exclusif de la construction et de la vente des lampes et appareils de mon invention, destines a l'eclairage electrique pour la Suisse.

I declare, that the Societe d'Appareillage Electrique (Company for electric apparatus or Electric Co.) of Geneva and the companies dependent thereon have the sole and exclusive right of manufacturing and selling, lamps and apparatus of my invention, intended for electric illumination in Switzerland.

Sodann ist
Unterzeichnet
[illegible]

Form No. 3.

CABLE MESSAGE.

1883-02-13

THE WESTERN UNION TELEGRAPH COMPANY.

All CABLE MESSAGES received for transmission must be written on the Message Blanks provided by this Company for that purpose, under and subject to the conditions printed thereon, and on the back hereof, which conditions have been agreed to by the sender of the following message.

THOS. T. ECKERT, General Manager — NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
419	Ay	Dy	

7 Paris

Received at FILED AT 854 BROADWAY

Feb 13 1888.

To Eknoside

Ny Thos A Edison

65 - 5 Ave

Did approve but scheme busted

Form No. 3.

CABLE MESSAGE.

1883-02-14

THE WESTERN UNION TELEGRAPH COMPANY.

All CABLE MESSAGES received for transmission must be written on the Message Blanks provided by this Company for that purpose, under and subject to the conditions printed thereon, and on the back hereof, which conditions have been agreed to by the sender of the following message.

THOS. T. ECKERT, General Manager — NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
397	in	h	570

17 Paris

Received at FILED AT 854 BROADWAY

Fy 14 1888.

To Eknoside Ny - Thos A Edison

65 fifth ave Ny

Important have favorable answer our cable reyrechy today enforcing cash payment will bust combination

1883-02-14

Societé d'Appareillage Electrique

Geneve, le 14 February 1883.

Thomas A. Edison Esqre
65 Fifth Avenue
New York

Dear Sir

We beg to confirm our letter of the 19th January last. Since then we received your Cable addressed to Mr Eurettini to which he replied as follows:

"Send instructions Selin by letter pay against documents."

We have instructed Mess. A. Selin & Co to pay you henceforth for all your sent on delivery invoice and Bill of Lading and we hope that this arrangement will be satisfactory to you, but at the same time we must repeat our request, that you should reduce the price of the Lamps to us, considering that you have 50 % of our profits; besides there are agents in London who offer your Lamps all over Europe for Three Shillings and Six pence and Harbet from whom we had direct received letters from that house in London offering the Lamps at 3 sh. 6 d.; consequently our rights for the exclusive sale of the Lamps in Switzerland can only be protected by

enabling us to sell as cheap as those English agents.

We have our order from 10000 Lamps to only 5000 Lamps at present of which please send

2400 of 8 Candles
2800 of 16 do
800 of 32 do

Mr Curettini wrote you on the 28th of last December requesting you to send him the models and drawings of regulators, motors, sockets, automatic cut-outs & all other accessories for your system of lighting, but no reply up to the present moment has come.

We beg to confirm this above request and should feel obliged if you would send all these things as soon as possible and by express — Messrs J. Sellon & Co will pay for them.

We remain
Dear Sir
Yours very truly

SOCIETE
D'APPAREILLAGE ÉLECTRIQUE
GENÈVE
LE DIRECTEUR

The consulting engineer
J. Curettini

J. Sherbulier

[FROM COMITATO APPLICAZIONI dell'ELETTRICITA?]

1883-02-15

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

Grand Diplôme d'honneur PARIS 1881

Ivry-sur-Seine, le Jeudi 15 Fr 83

Milan

Cie Continentale Edison

Paris

Your last letter brings us copy of a letter of Mr Edison, We are sorry to see that Mr Edison comes back again on the question of the engines which we thought arranged by his dispatch of Jan, 30th communicated by you to us, and also by the declaration contained in your letters of Jan 31st, and 1st inst, which we have in hand, & on which we have opened you the new credits & remitted the funds asked by you. We are convinced that the whole business will be arranged in the most amiable way.

As soon as our Central Station will be increased (the 4800 lamps, which will be lighted by the 4 dynamos we have, are all engaged) & for next winter we will have to light the theatre of the Scala, needing itself alone 2 dynamos.

1883.02.15

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

Grand Diplôme d'honneur PARIS 1881

Ivry-sur-Seine, le

2

We believe that we shall order 2 or 4 new dynamos and only 1 or 2 engines. By coupling one of the old Porter with an Armington, thus the question will be solved.

We could perhaps sell 2 dynamos C to be worked alone & then there will be no difficulty to put on it one of the old engines; difficulties arrise only when it is question of working simultaneously several dynamos. On the other side there could be another resolution of the question, that is, to find a favourable opportunity to sell the old engines, this does not seem at all difficult in a country which, likeaus, is rapidly increasing its industrial manufactures.

What we are saying now is for the purpose of showing that we do not at all pretend to have 2 new engines free of expense, but that we are actuated by the best intention to find an

1883-02-15

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

Grand Diplôme d'honneur PARIS 1881

Ivry-sur-Seine, le

3

equitable way of saving as well your interest, as ours, for, Gentlemen, it is also for your proper interest.
If one station works badly, we shall not form a society, because the sale of a few isolated plants, will not warrant the forming of a share company with a capital of several millions & ~~which~~ we are convinced that nobody either in Italy, or in any other part of ~~Italy~~ Europe would for a long time put up the money to form a Central Station of electricity.
So it is necessary to work as perfectly as possible in the very beginning; this is the interest of Mr Edison himself, who will be able to sell a number of these large machines, if the one exhibited will have given a good result. Besides you may be sure that Mr Edison as well as the Compagnie Continental, have real friends in us, friends who will always do their utmost, to save their interests.

1883-02-15

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

Grand Diplôme d'honneur Paris 1881

Ivry-sur-Seine, le

4

You may judge by the enormous sacrifice which we impose on ourselves, that we are not people to make difficulty about a few thousands francs, we only ask that we are put as quick as possible in good working condition. We see with pleasure that Mr Edison is sending the engines, reserving the question of settlement for future arrangements. You can write him that we agree with pleasure with him on this point.

We hope to hear very soon that the engines have been shipped, because we are in great need of them. We began a few days since to put up the dynamos, we will put up only 2 Porter engines & extract then the 2 Armingtons.

The other works continue pretty well, though the season is not very favourable. Two thirds of the contractors are placed & we wait for Mr Littell of Babcock & Wilcox to begin the putting up of the two boilers

1883-02-15

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

Grand Diplôme
d'honneur
PARIS 1881

Ivry-sur-Seine, le

5

arrived several weeks ago; we hope that we can invite you in about months to the inauguration of our Station.

We believe that you will be astonished at the work done in so short a time

Yours Truly

10

Feb. 22. 83

Batchelor &
Stokes Co.

1883-02-19

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ÉLECTRICITÉ

Grand Diplôme d'honneur

PARIS 1881

443

Ivry-sur-Seine, le

5, RUE DU PARC.

Feb. 19 1883.

My dear Edison,

Enclosed please find check for $97.10 — I have received 4 drafts from Duebel for 250 Frs each payable Jan, Feb, Mch, Apl 1st each. Two of these are past due and I have collected 500 which I send you at 5.17. Please give Duebel credit for same

Yours truly

Chas Batchelor

1 Enclosure.

1883-02-20

1

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital: 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ÉLECTRICITÉ

Grand Diplôme d'honneur PARIS 1881

Ivry-sur-Seine, le 20 February 83

5, RUE DU PARC.

Mr A. Edison

65 5th Avenue
New York

My dear Edison

Accounts Statement of Société Industrielle a/c to hand; please give me the a/c previous to this as you say with Chas Batchelor so that we shall then have it complete from the beginning.

Motors I have asked the Cie Continentale to order me a set of these to Antwerp; I presume they will do so.

C. Dynamo. I am glad to receive Clarke's sketch; it will help me a great deal.

Milan engines. I received your letter of the 8th inst regarding these and shall look over the correspondence and see what can be done.

Patents 58 to 60. I received Dyer's letter on these cases and have, as understood, telegraphed as follows:

Eckwood. New York. received;

this matter I shall attend to immediately.

Private a/c Many thanks for statement of my a/c with you for last year which I shall look over when I get time.

Armington I have just received a letter from him saying he leaves on the 21st inst; I am glad of that, as we want now these C Dynamos very badly in Paris.

Yours very truly
Chas Batchelor

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ÉLECTRICITÉ
Grand Diplôme d'honneur
PARIS 1881

Ivry-sur-Seine, le
22 Feb. 1883

Thos A Edison Esq
New York —

My dear Edison,

In conformity with your letter of 8th Feb I have read your letter of 16 Jan and 2nd Feb. to the Société Electrique and also your cable to them in which you say you ship the Milan engines & leave settlement for future adjustment —
I have not seen the letter of yours to Bailey as he is still in Berlin — I have talked the matter over with Hau and am sure that if the business had been done through our Paris people there would have been no question at all about it — A letter from the Italian Co has been received (which I have translated and send you inclosed) from which you will see that they are disposed to settle the thing amicably —
Of course you cannot be expected to suffer a loss whenever you find a new and better thing and I shall continually put this forward with our people until some satisfactory arrangement is reached

Very truly yours
Chas Batchelor

1883-02-23

SOCIÉTÉ ÉLECTRIQUE EDISON
SOCIÉTÉ ANONYME
Au Capital de 1 million de francs
EXPOSITION INTERNATIONALE D'ÉLECTRICITÉ
Paris 1881
GRAND DIPLOME D'HONNEUR
ADRESSE TÉLÉGRAPHIQUE
EDISON, PARIS

Paris, le 23rd Feby 1883

33, Avenue de l'Opéra

Thomas A. Edison Esq.
New-York.

Dear Sir,

We beg to point out that you have shipped us lately some lamps where the numbers of volts where not marked; such lamps have been forwarded to Antwerp and Hamburg.

They only had a number ~~[illegible]~~ 22/80 which is evidently a number of manufacturing.

The consequence has been that our engineers where unable to put in their installations lamps having the same numbers of volts, and great breakage ensued.

You will oblige us by sending us always lamps with the volts marked on each lamp.

We have only received one copy of your bulletin N°15; we would be happy to receive about 25 copies of it, and a few more copies of N°16 which has just reached us.

1883-02-23

We enclose a copy of our bulletin No. 3 which has just been issued; we forward 25 more copies per post.

We remain, Dear Sir,
Yours very faithfully,

SOCIÉTÉ ÉLECTRIQUE EDISON

Administrateur délégué

1883-02-26

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ELECTRICITÉ

Grand Diplôme 452
d'Honneur
PARIS 1881

Ivry-sur-Seine, le
26 Feb. 1883

Thos A. Edison Esq

New York —

My dear Edison,

Many thanks for Statement of account as sent by Insul — I find it quite correct and am perfectly satisfied; considering everything I think it is a very handsome year —

Please give me credit for $23.10 paid to Brandon Apl 13th 1882 for extension to Spanish Colonies of Sets 24 and 25 and mentioned in my letter of that date. receipted bill for which was enclosed in registered letter 14 Oct 1882 —

Also give me credit for $63.05 cash paid to Brandon for Set 38 which you ordered me to take for you in France alone; Brandon's receipt for this was enclosed in registered letter of 14 Oct 1882 —

Also make me a debtor to $11.55 money that I claimed from Brandon as I found that the extension of 18 S. to the Spanish Colonies Sept 18th 1881 had been paid for by Mr. Sorel as well as myself.

This makes balance Jan 31st in my favor $2404,32

Yours truly

Chas Batchelor

1883-02-26

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ELECTRICITÉ

Grand Diplôme d'honneur PARIS 1881

Ivry-sur-Seine, le 26. Feb. 1883.

Mr. A. Edison Esq. New York.

My dear Edison,

I confirm my cables as follows:—

Feb 20th "Ekrwaide Newyork received"
" 24th "Ekrwaide Newyork. Ask. Dyer"

from you

Feb 23rd "Received what"

I asked you in my letter of Jan 4th to pay Mr Cunningham $300. I do not notice this payment in your bills so please make the payment $300 instead

Very truly yours

Cha Batchelor

1883-02-26

Société d'Appareillage Electrique.

Genève, le 26 February 1883

Thomas A. Edison Esqre
65. Fifth Avenue
New York.

Dear Sir

We beg to confirm our letter of the 14th inst. and to inform you that our cable address is actually

"Cherbulez. Petitot
Geneva"

We are waiting for your news and remain
Dear Sir
Yours very truly

SOCIÉTÉ
D'APPAREILLAGE ÉLECTRIQUE
GENÈVE
LE DIRECTEUR

34 1883-02-27.

OFFICE OF A. ISELIN & CO.,
48 Wall Street.

P. O. Box 910.

New York, Feby 27 1883

Thomas A. Edison Esq

Dear Sir

A credit has been opened with us in favor of the Société d'Appareillage Electrique, but we are directed not to make any payments except on orders from said Co. The bankers' letter opening the credit, reached us yesterday as soon as we received instructions from the Co as to the payts to be made under it we will advise you.

Very resp

A. Iselin

1883-02-28

OFFICE OF A. ISELIN & CO.,
48 WALL STREET,

P. O. BOX 910.

New York, Feby 28 1883

Thomas A. Edison Esq
65 Fifth avenue

Dear Sir

We are today in receipt of a telegram from Baron Sinigorland requesting us to hold, at your disposal, for account of the "Societe d'Appareillages Electriques de Geneve" the sum of $7,500 - seventy five hundred dollars up to which amount we will therefore pay your bills against said Co

Yours respy

A. Iselin

Blank No. 3.

1883-03-03

No. 68 Cody **CABLE MESSAGE.** 947

THE WESTERN UNION TELEGRAPH COMPANY.

All CABLE MESSAGES received for transmission must be written on the Message Blanks provided by this Company for that purpose, under and subject to the conditions printed thereon, and on the back hereof, which conditions have been agreed to by the sender of the following message.

A. R. BREWER, Secretary. NORVIN GREEN, President.

Check. 15 Berlin

Received at Mch 3 1883

Eknoside ny

Thos A Edison 65 5 ans

Private Can Lamp Price Be Lowered in quantities. for Germany instead making factory

Forty Cents lowest ordered

large quantities recently improved

life and Costs more thought poor policy start factory as we shall in year or ~~[illegible]~~ so very much cheaper.

Edison

To guard against mistakes on the lines of this Company, the sender of every message should order it repeated; that is, telegraphed back from the terminus of said lines to the Originating Office. For such repeating, the sender will be charged in addition, one half the usual tolls of this Company, on that portion of its lines over which such message passes.

This Company will not assume any responsibility in respect to any Message beyond the terminus of its own lines; and it is agreed between the sender of the following message and this Company, that said Company shall not be liable for mistakes or delays in transmission or delivery, or for non-delivery to the next connecting Telegraph Company, of any unrepeated message, beyond the amount of that portion of the charge which may or shall accrue to this Company out of the amount received from the sender for this, and the other companies, by whose lines such message may pass to reach its destination; and that this Company shall not be liable for mistakes in the transmission or delivery, or for non-delivery to the next connecting Telegraph Company, of any repeated message, beyond fifty times the extra sum received by this Company from the sender for repeating such message over its own lines; and that this Company shall not be liable in any case for delays arising from interruptions in the workings of its lines, nor for errors in cipher or obscure messages. And this Company is hereby made the agent of the sender, without liability, to forward any message over the lines of any other company to reach its destination.

This Company is not to be liable for damages in any case, where the claim is not presented in writing, within thirty days after the sending of the message.

Received at

Mch 3 65

Washington

[FROM GEORGE W. SHERMAN?]

1883-03-05

Form No. 3.

CABLE MESSAGE.

THE WESTERN UNION TELEGRAPH COMPANY.

All CABLE MESSAGES received for transmission must be written on the Message Blanks provided by this Company for that purpose, under and subject to the conditions printed thereon, and on the back hereof, which conditions have been agreed to by the sender of the following message.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER | SENT BY | RECD BY | CHECK

Received at OFFICE AT 254 BROADWAY.

Mch 5 1888.

To Edison New York

65 5 ave

Germany Warren &

Have received grant for this whole city have formed pool of ground can rent for about 20 mil yearly-

1883-03-10

Cie CONTINENTALE EDISON
SOCIÉTÉ ANONYME
Au Capital de 1 million de francs

EXPOSITION INTERNATIONALE D'ÉLECTRICITÉ
Paris 1881
GRAND DIPLOME D'HONNEUR

ADRESSE TÉLÉGRAPHIQUE
EDISON, PARIS

Paris, le 10 March 1883.
33. Avenue de l'Opéra

Thomas A. Edison Esq.
New York.

Dear Sir,

We have duly received your favor of 6th February and we thank you for the information you kindly gave us on the falsehood of the statement which had been made in the Berliner Börsen Zeitung of 23rd Dec.

Please send to our order in Antwerp:

1 meter of each size

and oblige,

Yours truly,

COMPAGNIE CONTINENTALE EDISON

Administrateur délégué

We enclose the translation of a letter we have received from the Italian Committe, and which seems to bring their claim about the Porter Engines to a conclusion.

[ENCLOSURE]

[FEBRUARY 15, 1883]

Your last letter brings us copy of a letter of a letter of Mr. Edison; we are sorry to see that Mr. Edison comes back again on the question of the engines which we believed arranged by his dispatch of Jany 30th, communicated by you to us and also by the declaration contained in your letter Jany 31 & first inst. which we have in hand and on which we have opened you the new credit and remitted the funds asked by you, we are convinced that the whole business will be arranged in the most amiable way. As soon as our Central Station will have a first increase " the 1800 lamps which will be lighted by the 4 dynamos we have are all engaged & for next winter we will have to light the Theatre of the Scala needing itself alone 2 dynamos " we believe that we will order 2 or 4 new dynamos & only 1 or 2 engines in coupling 1 of the old Porter with an Armington then the question will be resolved. We could perhaps also sell 1 dyn. C to be worked alone & then there will be no difficulty to put on it 1 of the old engines difficulties arising only when it is question to work simultaneously several dynamos. On the other side there could be also another resolution taken, that is to find a favorable opportunity to sell the old engines which does not seem at all difficult in a country which as ours is on the way to form its industrial material. All what we are saying now is for the purpose to show that we do not at all pretend to have 2 new engines free of charge, but that we are penetrated of the best intention to find an equitable way to save as well your interest as ours, for Gentlemen, it is also for your proper interest. If our station works badly, we will not form a Society because for the sale of several isolated plants, it is not possible to form a Co with a capital of several millions & we are ready to say nobody, neither in Italy nor in any other part of Europe would, for a long time, furnish money to form a Central Station of Electricity. So it is necessary to work as well as possible in the very

[ENCLOSURE]

beginning this is the interest of Mr Edison himself, who will be able to sell several of that large machines if the first exhibited will have given a good result, besides you may be sure that as well Mr Edison as the Co. C. have real friends with us, friends who will always do their possible to save the interest.

Besides you may judge by the enormous sacrifice which we impose on ourselves that we are not people to make difficulty about a few 1000 fcs. we only ask to be put as quick as possible in the situation to work.

Also we see with pleasure that Mr Edison is sending the engines receiving the question of settlement for future arrangements. We can write him that we agree with pleasure with him on this point.

We hope to hear very soon that the engine has been shipped because we are in great need of them. We begun since a few days to put up the dynamos. We will put up only 2 Porter Engines & expected this of the 3 Organingtons. The other work continues pretty well though the season is not very favorable & 2 thirds of the conductors are placed & we wait for Mr Lebell of the Co. Babcock & Wilcox to begun the putting up of the 2 boilers arrived since several weeks. so we hope that we can invite you in about 2 months to the inauguration of our Station. We believe that you will be astonished of the work done in so short a time.

From the Comitato Italiano per le Applicazioni del Sistema Edison.

No. 1. S. B. Eaton's Copy

A A

Memorandum of Agreement

entered in to this day between

1. The firm Messrs **Siemens & Halske** of Berlin on the one part, and
2. Mr. **Thomas Alva Edison** of New-York. represented by his duly authorized attorney Mr. **Joshua F. Bailey** of Paris, at present residing here,
3. The **Edison Electric Light Compagnie** of Europe Limited of New-York, represented by the aforesaid Mr. **Joshua F. Bailey**,
4. The **Joint Stock-Company, Compagnie Continentale Edison** of Paris, also represented by the aforesaid Mr. **J. F. Bailey**,
5. The Banking-House **Gebrüder Sulzbach** (Sulzbach Brothers) of Frankfort on the Maine,
6. The Banking-House **Jacob Landau** of Berlin,
7. The **Joint Stock-Company, „National-Bank für Deutschland"** (National-Bank for Germany) of Berlin,

on the other part.

Art. 1.

Mr. Thomas Alva Edison, and the Edison Electric Light-Company of New-York Limited, as proprietors of the patent-rights of the former, have, pursuant to a contract transferred

to the Joint Stock-Company „Compagnie Continentale Edison," domiciled in Paris, the right fully to exploit the patent-rights already and still to be granted to Mr. Edison, in the province of the measurement, distribution and application of the electric current, as also of the electric lighting and production (engendering) of energy, for the Empire of Germany.

With the consent of Mr. Thomas Alva Edison and the Edison Electric Light-Company of Europe Limited, the Compagnie Continentale Edison of Paris, has entered in to a further contract with the said banking-houses Sulzbach Brothers, Jacob Landau and the National-Bank for Germany, pursuant to which, the systematic exploitation of the above mentioned patent rights, within the territory of the German Empire, shall be transferred to a Joint Stock-Company to be called into existence and duly entered on the Trade-Register by the three Banking-Houses aforesaid.

In the interpretation of these presents the following words and expressions shall have the following meaning. „The Light-Company" means the „Edison Electric Light-Company Limited of New-York". — „The Continentale" means the „Compagnie Continentale Edison" of Paris; „The Consortium" or Syndicate, means and includes the whole of the aforementioned German banks enumerated as 5, 6 and 7. Said Consortium, together with the Joint Stock-Company to be established by it, to whom Mr. Edison and the Edison Electric Light-Company have pursuant to the foregoing, at the present time transferred, or at a future time will transfer the exclusive right to exploit their German-patent-rights, shall be comprised and understood by the collective denomination and style of „Mr. Edisons's assigns."

Art. 2.

So much having been said by way of preamble, the contracting parties being persuaded, that the propagation of electric lighting would be most effectually promoted by the aid of companies having large capital at their command to be exclusively devoted to said enterprise, conjointly with the industrial establishments appointed to manufacture the technical working material, have, with the view of protecting both the public and their own mutual interest, agreed as follows.

Art. 3.

Messrs. Siemens & Halske engage during the period that this contract shall be in force, not to attack or oppose the patents for incandescent electric light granted to Mr. Edison, or the Light Company for the German Empire, either by a suit for annulment, or otherwise, but on the contrary to co-operate as far as possible, in seeing said patents maintained and upheld in their essential parts and universally duly observed with regard to their lawful effect.

On the other hand, Mr. Edison, the Light Company, the Continentale and the Consortium hereby grant to Messrs. Siemens & Halske (during the term of these presents) the unrestricted right for the German Empire to manufacture, to have manufactured and to introduce into the trade and sell the articles of invention protected by the aforesaid incandescent-light patents in the German Empire. The contracting parties 2 to 7 accordingly renounce both for themselves and their successors, the right by themselves or by their agents or other representatives to lay any impediment, be it by recourse to law or any other way whatsoever, in

the aforesaid exploitation of the incandescent light patents on the part of Messrs. Siemens & Halske, while the latter in consideration of the aforesaid rights as also for further herein aftermentioned advantages thus granted, engage as defined in Articles 4 and 6 to pay to the former a royalty,

a) — on the application of incandescent-lamps and accessory parts thereto for lighting,

b) — on the sale of such lamps.

The legal effects of non-German Patents of Mr. Edison and the Light Company shall not be affected by these presents.

Art. 4.

On the strength of their aforesaid patents Mr. Edison and his assigns claim the right to make every incandescent lamp-lighting within the territory of the German Empire, dependent upon their permission, and consequently only to grant such right upon receipt of a royalty to be paid to them. Messrs. Siemens & Halske engage to pay such a royalty to Mr. Edison or to his duly appointed assign for the time being, on every incandescent lighting which they themselves may carry out within the territory of the German Empire, or cause to be executed by their agents or workmen.

?

Bailey says Latch (a) approved this standard of royalty.

Said royalty shall be paid for every horse power actually consumed in the incandescent lamps equal to 75 Kilogrammeter per second. The amount of horse power thus consumed in the lamps shall be determined according to the system of electric measurement, the contracting parties reserving to themselves the right for the future to arrive at the simplest and safest manner possible of collecting this due. The royalty to be so levied on the first fifty horse power to be calculated

in any installation, shall amount to 25 Marks per horse power and 32 Marks for every further horse power. On extraordinary installations of a temporary nature however, no such royalty shall be paid.

See my note p. 6.

In installations for mixed lighting (i. e. incandescent and arc. light) the above fixed royalty shall only be paid for horse power actually employed for the incandescent light contained in such combination.

Messrs. Siemens & Halske shall not however pay any royalty on current producing machines sold by them, where they do not themselves execute the installations or have them executed by their agents or workmen. On the other hand they engage to inform the purchasers of such machines by written document that these machines may be used for incandescent light in Germany only upon fulfilment of above conditions (prepayment of the royalty of 25 or 32 Marks), at the same time pointing out that an extension of utilisation shall only be admissible upon coming to an arrangement with Mr. Edison and his assigns. Messrs. Siemens & Halske will furnish Mr. Edison and his assigns every month with a list of the dynamo machines sold by them, for employment in Germany and available for incandescent lighting together with a specification of their manufacturing numbers the name of purchaser and the sort of machine and royalty paid thereon, and, on the other hand, in consideration of Art. 18. receive a similar list on the part of Mr. Edison and his assigns, giving a specification of the dynamo machines sold for use in Germany by them and their holders of licences. Messrs. Siemens & Halske furthermore engage to assist Mr. Edison and his

assigns to the best of their ability in the collection of such royalties.

Mr. Edison and his assigns engage not to allow to any third parties the use of current producing machines for incandescent lighting in Germany upon more favourable terms than those herein granted to Messrs Siemens & Halske. The percentage allotted to Messrs Siemens & Halske on such licences ceded to third parties are defined in Article 13. In like manner Mr. Edison and his assigns, as also Messrs Siemens & Halske, engage, as far as Germany is concerned, in dealing with buyers, who are neither holders of Edison licences in or for Germany, nor work their installations with machines of the Edison Companies or of Messrs Siemens & Halske, not to sell the lamps below the highest published price-current rates without any discount whatsoever thereon.

Art. 5.

Messrs. Siemens & Halske during the period of these presents, forego the right to engage in, or carry on, on their own account, permanent works for the professed purpose of supplying light against the payment of consumption of light. This renunciation shall distinctly comprise every installation from which anybody can have light, but shall not affect the working of such installations, in which the ownership of such installations shall pass over to the light consumer within a period of not more than 6 years, even were it possible to consider them up to the time of their transfer as light-furnishing establishments, nor shall it moreover apply to the working of such installations intended only to serve purposes for temporary lighting, as provided for in Article 4 of these presents.

Mr B. notes (Mch 20) that the acc. "restricts" Siemens as to Central Stations. See also "a" p. 5, and "a" p. 9 –

Art. 6.

Messrs. Siemens & Halske, (duly recognizing Mr. Edison's meritorious services in the invention and execution of the incandescent lamp), engage to pay to Mr. Edison, or to his duly appointed successor in respect of the patent rights, a royalty on every incandescent lamp, which they (Messrs. Siemens & Halske) shall use or sell for purposes of use within the German Empire, to the exclusion, however, of all such lamps as they shall procure from Mr. Edison or his successors, and exclusive moreover of those, which they use within their own manufacturing and business premises. All lamps manufactured by Messrs. Siemens & Halske and subject to said royalty, shall receive a distinguishing manufacturing mark.. A similar distinguishing mark shall also be made on the part of the future German Edison Company on all lamps introduced into the trade by them in Germany.

The royalty shall, independent of the light power of the lamps, be fixed at $33^1/_3$ per cent. (say thirty three and one third per cent.) of the cost price for the time being, at which the lamps are manufactured in the factory of the Light Company of Newyork, or any such factory from which the future German Edison Company shall procure the greater part of its lamps, Mr. Edison or his assigns engaging every half year, on making up their books, to inform Messrs. Siemens & Halske of the ruling price. The royalty per lamp however shall not exceed the amount of 50 Pf. (say fifty Pfennige).

See Art. 41. "SS."

The minimum price at which Mr. Edison or his assigns may sell the incandescent lamps in Germany, shall be the

New York Light Company's cost price for the time being of the lamp, or that of the factory from which the future German Edison Company shall purchase the majority of its lamps, plus an advance or profit of $33^1/_3$ per cent, also when and where the discount is allowed. The lower price limit so fixed shall likewise be binding upon Messrs. Siemens & Halske.

Art. 7.

This royalty (Art. 6) shall not be paid on all lamps which Messrs. Siemens & Halske may procure from Mr. Edison, his assigns, or the German Joint Stock Company about to be formed (Art. 1).

On the contrary, in business transactions between them and Messrs. Siemens & Halske, the following privileged sale prices shall be accorded to the latter, in consideration of theirs i. e. Messrs. Siemens & Halske's counter-services as provided for in these presents, without prejudice to any future agreement with regard to further advantages of this description:

a. On incandescent lamps up to 16 Candle power, Messrs. Siemens & Halske shall enjoy a discount of 25 % (Twentyfive per cent.) on the prices current and under all circumstances, however, a discount affording them an advantage of at least 10 % (Ten per cent.) on the price current rate over that allowed to any other German customer.

b. Should the price-current rate of the afore mentioned lamps, for Germany, delivered in Berlin be fixed at less than 4 Marks Messrs. Siemens & Halske

shall have the lamp at a figure, which shall at least be five per cent. lower than that allowed to any other German customer. Should the price so fixed amount to more than four Marks or more each, as mentioned sub. a. per lamp, Messrs. Siemens & Halske shall be entitled to demand their supply at this latter price.

c. On lamps of more than 16 candle power Messrs. Siemens & Halske shall receive a discount on the price current rate, giving them an advantage over that allowed to any other German Customer of at least five per cent. on the price-current rate.

Messrs. Siemens & Halske shall be at liberty, subject to due observation of the lower price limit, drawn in Art. 6 at he end, to sell lamps manufactured by themselves or procured elsewhere at whatever price they please, whereas they shall not sell lamps procured from Mr. Edison or his assigns — i. e. without payment of a royalty — below the Edison pricecurrent rate, nor sell the same at a higher rate of discount than that allowed thereon to third parties.

Mr. Edison and his assigns shall keep Messrs. Siemens & Halske duly informed from time to time of their price current and discount rates, as also of any alterations of said prices and discount rates.

An arrangement with regard to the mutual uniformity of the selling prices of both afore mentioned lamps is by the bye reserved and taken into distinct consideration.

The prices charged by Mr. Edison or his assigns for lamps, when the latter are used for installations for the supply of light to various consumers, upon payment of such

(a) See my note p. 6.

consumption of light, and which prices may not fall below the cost price for the time being, plus an advance or profit of $33^1/_3$ per cent. (Art. 6 at the end) shall not be taken into consideration in determining the preference prices to be allowed to Messrs. Siemens & Halske.

Art. 8.

Mr. Edison and the contracting parties sub 3 to 7 in consideration of the counter-services of Messrs. Siemens & Halske as provided for in these presents renounce in favour of Messrs. Siemens & Halske, for themselves and all their assigns, in the exploitation of the Edison patents, the right to manufacture machines, apparatus and materials employed in their installations in Germany for electric light lighting except the following:

a. Incandescent lamps,

b. Sockets,

c. Safety catches,

d. Commutators,

e. All such articles which Messrs. Siemens & Halske themselves after having purchased, would dispose of again without any operation of fabrication such as: uncovered wire, porcelain insulators, etc.

f. Steam engines or other motors, boilers and appliances for motive power.

g. Chandeliers and fixtures for lamps.

Mr. Edison or his assigns shall not be bound in the acquirement and manufacture of their stock of articles to the categories a) to g). On the other hand, out of the same con-

sideration as aforesaid ~~afore said~~ they engage to have all such other articles, mentioned under 1—4 inclusive, with exclusively manufactured by, and to procure them from Messrs. Siemens & Halske subject to the following terms and conditions: !?

1. Current producing machines (dynamos) of the Edison type, which Messrs. Siemens & Halske have to manufacture and deliver at prices, which for machines, without packing, delivered free at the place of installation in Berlin intended for installation in Berlin, and in the case of other machines, including packing and delivered free at any railway station of Berlin, shall not exceed the export prices at which the Société Industrielle et Commerciale Edison of Paris shall deliver the corresponding types at the time being, delivered free at a Paris railway station including packing. For any orders executed within the first manufacturing year, which shall be calculated from the date at which the obligation of Messrs. Siemens & Halske to manufacture, shall begin, and orders have actually been received, the price however charged by Messrs. Siemens & Halske may exceed the above mentioned Paris price by five per cent.

2. The delivery prices of Messrs. Siemens & Halske for conductors of Edison special construction junction boxes, T pieces, as also of all other articles not specially enumerated here, belonging to the Edison conducting system, shall, inclusive of packing and delivered free at a Berlin railway station, or unpacked delivered at any other place in Berlin free of delivery at the place of installation, not exceed the prices

charged by the Société Industrielle et Commerciale Edison of Paris, for the same objects inclusive of packing and delivery free at a Paris railway station.

A modification of the prices agreed upon ad 1 and 2 may be demanded on the part of Messrs. Siemens & Halske, should it turn out that at the above mentioned Paris prices they no longer make a profit of 20 pCt. (twenty per cent.) beyond their own total cost price of manufacture including price of material, wages and other reasonable general costs; — on the part of Mr. Edison and his assigns, should it prove that the above prices exceed Messrs. Siemens & Halske's own cost price as afore specified by more than 30 pCt. (thirty per cent).

In the event of an arrangement not being come to about such a modification as to the reason or the amount thereof, three arbitrators shall fix the price within the above specified limits Messrs. Siemens & Halske's own cost price plus 20 per cent or 30 per cent respectively with binding force on all parties, and if necessary by a majority of votes. Each of the two contending parties shall appoint an arbitrator and shall notify the name of the person so elected to the opposite party by means of a registered letter. The third arbitrator shall, even upon the motion of one of the said parties, be appointed by the College of Elders of the Berlin Merchants Corporation, or by the Presidency of the Royal District Court of Berlin I. Should one of the parties fail to nominate an arbitrator, within a fortnight after the receipt of the summons in writing issued in respect thereof by the other party, such right of nomination shall also pass over to the aforesaid College of Elders of the Berlin Merchants' Corporation, or the Presidency of the Royal District Court of Berlin I. The arbitrators shall at the same time decide upon, who shall bear, and in what proportion, the costs of

such process of valuation. Their assessment shall apply to all orders which shall have been given and accepted subsequent to the notification of a motion for a modification of price, subject to the proviso of the latter in as far as the arbitrators do not fix the period of limitation at a later date.

3. The delivery price for Messrs. Siemens & Halske for cable for incandescent and arc light, being a special construction of this firm, shall be charged, delivered at the factory, exclusive of packing, at a discount exceeding that allowed to any other German buyer at the time being by five per cent.

4. Mr. Edison and his assigns shall likewise preferably purchase from Messrs. Siemens & Halske all wires for inside installations, so far and so long as said firm shall supply said articles upon the same terms and in particular of an equal quality and within similar periods of delivery at the same, or at lower prices, than those at which they can be procured and delivered at Berlin from any other manufacturer.

Under no circumstances whatever shall the prices to be charged by Messrs. Siemens & Halske to Mr. Edison and his assigns for articles enumerated in No. 1, 2 and 4 exceed the prices charged to third parties for the same articles during the same period of calculation.

The engagement on the part of Messrs. Siemens & Halske to deliver machines &c. subject to the foregoing conditions shall take effect six months from the date of signing this contract. The engagement on the part of Mr. Edison and his assigns to give their orders to Messrs. Siemens & Halske in accordance with these presents shall on the other hand

take effect from such date at which Messrs. Siemens & Halske declare themselves prepared to execute such orders. Such orders shall be delivered within three months after receipt of a written order except where a shorter term of delivery is stipulated in accordance with No. 4.

A reasonable extension of the time for delivery shall be allowed for every first supply according to a new model.

Mr. Edison and his assigns shall be entitled to manufacture, or cause to be manufactured, the dynamo machines for use in Germany in their own factories, or in those of a non-German Edison Company, whenever Messrs. Siemens & Halske state their unwillingness in future to continue executing orders. In doing so, Messrs. Siemens & Halske shall be bound to give a notice to this effect of not less than six months.

In the event of Messrs. Siemens & Halske giving such notice, Mr. Edison and his assigns, desiring to recognize the merits of Dr. Werner Siemens and of his firm in the invention and carrying out of the dynamo-electric machine, engage — while this contract is in force — to pay a royalty to Messrs. Siemens & Halske on every such machine made in their own (i. e. the Edison) workshops. This royalty shall be fixed at five per cent. on such price as actually was last paid to Messrs. Siemens & Halske for a dynamo machine of the respective type, or what, in the case of new types would have to be paid in accordance with the foregoing (see No. 1 &c.).

In as far as, apart from the case of the general notice afore mentioned to dissolve their supply engagement, Messrs. Siemens & Halske should declare themselves incapable of wholly or partially carrying out within the time appointed above specified for delivery, an order given to satisfy a demonstrable requirement, Mr. Edison and his assigns shall be at liberty

See p. 5. Bailey's letter of Feb 20.

to execute this part of the order so declined or any portion thereof not executed by Messrs. Siemens & Halske in the workshops of the Edison Company or elsewhere in Germany. M. Edison and his assigns shall however remain bound to give Messrs. Siemens & Halske the first offer in the case of further new orders.

In the cases above referred to, the royalty of five per cent. shall lapse on such machines, in respect of which proof can be adduced, that they might actually have been used prior to the date of their delivery, or before they ought to have been delivered by the party ordering them.

The foregoing arrangements made in respect of obligations of delivery, and notice of dissolving the same, as also the times of delivery together with the right of self manufacture in their own workshops shall in like manner apply to the articles enumerated in clause 2 of this Article. The royalty of five per cent., as stipulated for dynamo machines, shall not however come within the limits of these provisions.

Mr. Edison and his assigns will, in the disposition of their orders, as far as shall be practicable with their commercial convenience, pay due regard to the facilitation and continuity of Messrs. Siemens & Halske's manufacturing.

Messrs. Siemens & Halske, will, in accordance with their established custom, affix the name of their firm to all machinery and apparatus made, in pursuance of these presents and in so far as such are manufactured according to an Edison special construction affix along with it, a further stamp indicating such Edison quality therein, which shall appear in a similar way to the above mentioned reference to the firm of Siemens & Halske.

Art. 9.

Such machines, apparatus and materials as are not included in the exceptions provided for in Art. 8, clause a) to g), being the special construction of Messrs. Siemens & Halske, and applied on the part of Mr. Edison or his assigns for the installation of incandescent light, within the German Empire, shall be supplied unpacked to Mr. Edison or his assigns at a discount of 15 % (fifteen per cent), below such price or prices, at which Messrs. Siemens & Halske supply such articles unpacked delivered in Berlin in accordance with their current price list for the time being. Under all circumstances, the discount thus allowed by Messrs. Siemens & Halske, to Mr. Edison, or his assigns must give the latter an advantage of not less than 5 % (five per cent.) on the current prices for the time being over every other purchaser of such articles for use in Germany.

The foregoing compact as to discount shall not apply to coals for arc-light lamps, which said coals Messrs. Siemens & Halske shall be bound upon demand to supply to Mr. Edison and his assigns. Mr. Edison and his assigns shall not be obliged to procure their stock of said coals from Messrs. Siemens & Halske.

Art. 10.

Both contracting parties and their assigns, will, as in the case of the incandescent lamps (Art. 7) endeavour also with regard to the dynamo machine and other articles employed for incandescent lighting, to come to an understanding from time to time as to their respective mutual selling prices.

In so far such arrangement shall not be attained, each party shall as a matter of course, within the limits of the foregoing special stipulations, be entitled to fix its own price.

Each party however mutually engages, in the case of such articles as are the special construction of the other party, not to underbid the price-current for the time being of the latter, either in general, or by the allowance of greater discounts, larger commissions &c.

Whether the said price current rates mentioned in the foregoing Article are to be considered inclusive or exclusive of the royalties (Art. 4) shall depend upon the declaration given at the time being, on the part of the Contracting party whose special construction is in question when communicating the price current rates.

Art. 11.

Mr. Edison and his assigns, in consideration of Messrs. Siemens & Halske's counter services as provided for by these presents forego the right for Germany to exploit in arc-light lighting, any other system than that of Messrs. Siemens & Halske, or a system invented by Mr. Edison himself, and furthermore engage to purchase their supplies for installations of arc light from no other source than Messrs. Siemens & Halske without prejudice to the exceptions specified in Article 8 of these presents. Coals alone shall not be included in this arrangement. (Art. 9 at the end.)

Messrs. Siemens & Halske engage to allow Mr. Edison or his assigns on all materials entering into such arc light installations within the German Empire a discount of at least 12½ % (twelve and one half per cent.) on the rates of their

prices current for the time being, in so far as where higher discounts have not been agreed upon in these presents on conducting-articles used in both systems of lighting. They (Messrs. Siemens & Halske) furthermore engage that said discount, shall under all circumstances, exceed that which they allow to any other buyer of such articles for use in Germany, at the same period, by at least 2½% (two and one half per cent.), on the price current rates.

Messrs. Siemens & Halske shall moreover also in exploitations in Germany of an arc-light system invented by Mr. Edison himself, enjoy a preference, as regards the supply of the requisite articles thereto, without prejudice to the exceptions specified in Article 8 of these presents in such manner, that such orders for articles must be given to them, in as far as they will supply the requisite machines, apparatus and materials of a like quality, upon the same conditions, as have above been agreed upon (art. 8 and 9) for the supply of machines, apparatus and materials for incandescent light, and where they (Messrs. Siemens & Halske) declare themselves generally prepared to undertake such supply.

Any invention which the future German Edison Company shall itself invent or acquire shall be deemed equivalent to such invented by Mr. Edison himself in respect of arc-light system, provided that such invention may be considered as a material technical or industrial advance. In case of any dispute herein the decision shall rest with Mr. Edison.

With regard to the installation of arc light for ships of the Imperial German Navy, Mr. Edison and his assigns forego the same entirely in favour of Messrs. Siemens & Halske.

Art. 12.

Both of the contracting parties agree that the agents and representatives appointed by them, may be employed by either party, in doing which, they mutually impose upon each other the following restriction, viz. that neither of them will pay to such agent, a higher commission on articles forming a speciality of the other party, than such agents would receive from the other party himself. ?

Art. 13.

Mr. Edison and his assigns engage, in view of the German Imperial Patents (compare Art. 17) comprised in these presents, to issue to no one else licences, affording such third person advantages exceeding those granted by virtue of these presents to Messrs. Siemens & Halske.

Mr. Edison and his assigns will, in particular, in no case charge third persons a lower royalty, or grant to them more favourable selling prices.

Mr. Edison and his assigns engage, in consideration of this arrangement to pay to Messrs. Siemens & Halske 20 % (twenty per cent.) pro rata on the receipts or sum total, which he and his assigns may realize on grants to other parties of (licences for the application and exploitation of the Edison incandescent light patents.) *

Art. 14.

The patent licences granted by virtue of these presents, shall not be transferable to third persons, without the consent of the original grantor of such licence. Any alteration

* B. writes (Mch 20.) that this is not correct translation. He says the royalty "applies only to licenses granted for manufacture" –

of person in the proprietorship of firms, shall have no influence on the rights and duties proceeding from these presents.

Art. 15.

Monthly accounts shall be rendered of all supplies furnished, or services respectively rendered by the contracting parties to one another. The entries or booking of all supplies or services shall validate per date. The settlement in Cash of the balance in capital shall take place in the course of the following month. The rate of interest to be charged either way by account current shall be 4 % (four per cent.).

Art. 16.

Both contracting parties shall be obliged to furnish their agents and representatives with instructions in accordance with these presents.

Art. 17.

These presents shall immediately apply to all German Imperial patents in respect of incandescent lighting, which the German Edison Company about to be formed, shall acquire by virtue of its contracts with Mr. Edison, the Light Company and the Continentale, whether at present, or at any future time for exploitation — whether it be in the form of a transfer of the patent right itself, or in the form of a licence — or such patents, which the German Edison Company, shall itself independently apply for and procure, or acquire by way of transfer of patents or issue of licences.

On the other hand, Messrs Siemens & Halske will give Mr. Edison and his assigns the benefit of their present and future German patents in respect of incandescent light lighting, as long as such exist, by the supply of the articles protected by such patents upon the comditions fixed in Art. 9, as also by allowing the latter to apply their patented inventions to such articles respecting the manufacture whereof they, i. e. Messrs Siemens & Halsee enjoy full liberty according to Article 8 a to d.

This however shall only apply to such Siemens Halske's patents as have and shall have been issued before the 15 th November 1886, or up to the time, up to which the Edison patents fall within the terms of these presents.

Inventions, in respect of which application only for patent has been made, or shall be made, shall to be sure, not be considered as falling within the limits of these presents, until letters-patent shall have been granted. Both contracting parties shall however, on making such applications, as far as they apply to incandescent light, and if possible prior to the public exhibition of the specifications of such patents, mutually submit them to each other, in order first of all to endeavour to come to an understanding by way of compromise as to the admissibility of such claims for a patent.

Art. 18.

This contract shall extend over a period of ten years, counting from the day of its execution and shall always tacitly continue for a further year, unless notice to dissolve it be given by one or other of the parties not less than six months before its expiration.

Messrs. Siemens & Halske, however, have a right from the beginning of the fourth year of this contract, to give notice of dissolution of the same, provided such notice be given in writing within a period of six months, should it appear that the sum total of the light power of all incandescent installations in Germany in the said year, which have been established on the part of Messrs. Siemens & Halske and on the part of Mr. Edison, or his assigns and any licence-holders (Art. 1), or for which part of the machines, apparatus and lamps have been sold on the part of the contracting parties in the aforesaid Contract year, shall, taken altogether, not comprise one half of the sum total of light power which shall have been employed during the same period within the German Empire for incandescent lighting.

The term „established" or executed installations shall be taken to include such as have been distinctly ordered at the period of limitation. Messrs. Siemens & Halske shall furthermore be entitled to give six months notice of dissolution of these presents in writing, provided the future German Edison Company shall amalgamate with another Company — whether this be by taking over another Company, or by it itself being taken over by another Company. This right of withdrawal shall lapse, unless use be made thereof within a term of four weeks from the resolution of the General Meeting in respect of such amalgamation.

Art. 19.

All the engagements undertaken in these presents and all the renunciations expressed therein, shall only remain in legal force during the period of these presents themselves (Art. 18).

Art. 20.

All the contracting parties to these presents agree that such rights and obligations as have been drawn up in these presents, both for and against Mr. Edison, and his assigns, shall of their own accord pass over to the German Edison Company upon its entry on the Trade Register, provided the German Edison Company shall, within four weeks after its registration give a notification of acceptance in writing, said notification to be delivered to Messrs. Siemens & Halske, the latter being authorized to receive said notification by the contracting parties.

The contracting parties ad. 5, 6 und 7 engage towards the other contracting parties, that such declaration will be duly made. Should such declaration however not be given within the stipulated period, Messrs. Siemens & Halske shall at once be entitled to withdraw from these presents, by a declaration in writing to that effect to be delivered within a period not to exceed fourteen days.

Messrs. Siemens & Halske shall moreover be entitled to revoke their consent to the transfer of these aforesaid rights and obligations to the German Edison Company and to withdraw from these presents, should it appear that this Company shall have been constituted by virtue of Articles of Association materially deviating in any essential point from the Draft-Articles of Association annexed to these presents; such alterations, however, as shall become necessary upon demand of the Judge of the Trade Register Office shall not be deemed to be material alterations. Messrs. Siemens & Halske furthermore reserve to themselves a similar right to retire from these presents in the event of a material alteration

being made in the Contract, up te the period of the German Edison Company's establishment, entered into between the Compagnie Continentale, the Société Electrique and the Consortium or Syndicate, which said Contract has already been submitted to Messrs. Siemens & Halske and initialled by them, in token of their having taken cognisance thereof. These rights of withdrawal shall however lapse, provided Messrs. Siemens & Halske do not avail themselves of them within eight days after a communication in writing of the respective fact shall have been made by a declaration in writing.

In all cases in which, according to the foregoing, Messrs. Siemens & Halske have the right of withdrawal, they shall be entitled instead of such withdrawal to insist upon the fulfilment of these presents on the part of the contracting parties ad 2 to 7.

Art. 21.

The contracting parties do agree, that the patent licence rights granted herein to Messrs. Siemens & Halske shall be independent of the effects in law of the relations of contract existing between. Mr. Edison and the Electric Light-Company and the Compagnie Continentale. The German Edison Company shall acquire its licence rights from the Compagnie Continentale, subject however to the express consent hereby given on the part of Mr. Edison and the Electric Light-Company.

Mr. Edison and the Electric Light-Company, acknowledge, with the consent of the Compagnie Continentale, that such rights as have been stipulated in these presents towards. Messrs. Siemens & Halske shall immediately appertain to the German Edison Company about to be formed, provided the

said Company shall enter into these presents, and so long as it shall continue to exist. Should it however be completely dissolved, or not be established, said rights and privileges shall pass over to the Compagnie Continentale in Paris.

None of the contracting parties ad 2 to 7 shall be responsible to Messrs. Siemens & Halske for the due fulfilment of these presents on the part of the German Edison Company after its entry into these presents, without prejudice to the continuation of the licence rights granted by Mr. Edison and the Light-Company to Messrs. Siemens & Halske by these presents, even in the event of the German Edison Company not entering into these presents or in case of its being dissolved.

The German Edison Company shall not be liable for such infringements of these presents as shall not emanate from it, but from Mr. Edison and his assigns and which it (the German Edison Co.) was not in a position to prevent.

Art. 22.

These presents shall stand in material connection with the following contracts here under specified viz.

1. A supplementary contract between the same contracting parties concerning the agents Ungerer & Schulze of Strassburg in Alsace &c. * Market "AB"
2. A contract between the Banking Houses ad 5—7 inclusive, on the one part, and the Compagnie Continentale Edison and the Société Electrique Edison, both of Paris on the other part, with regard to the alteration of former contracts and the future establishment of the German Edison Company etc. etc. (compare above Art. 20).

"Secret" Cont.

* Bailey writes (Mch 20) that this cont. has "no interest" for N.Y. Co.

The contracting parties to these presents hereby furthermore mutually acknowledge, that the non-signing of one of the aforesaid three contracts on the part of one of the parties thereto within four days counting from 13 March 1883 shall entitle any-one of the contracting parties to these presents, to withdraw from the same, and do so by an immediate notice to that effect in writing to be adressed to Mr. A. Simson, Solicitor of Berlin as being authorized by all the contracting parties to receive any such notifications.

Art. 23.

Mr. Joshua F. Bailey hereby declares that he is duly authorized by the contracting parties enumerated at the beginning sub 2 and 3 to conclude these presents, concerning which he has legitimated himself by a telegram received by him from New York from Mr. Edison and the Electric Light Company of Europe Limited, which said telegram he has deposited with the aforesaid solicitor Mr. Simson, and guarantees his due authorisation and powers of Attorney on the part of the aforesaid parties. In consideration however of the exceptional importance of these presents, Mr. Bailey has engaged to procure within a period of thirty days the co-signature to these presents, as also to the supplementary contract mentioned in Art 22 No. 1, on the part of Mr. Th. A. Edison and the Edison Electric Light Company of Europe Limited, in such manner, that the respective signatures of the two latter shall be duly affixed to one or more copies hereof to be forwarded to them by him, particular regard being taken that such signatures shall be duly attested by the German Consul. Such, or a copy furnished with the respective signatures is to be forwarded to the aforesaid Solicitor, Mr. Simson for all of the Contracting parties, in

order that it may be delivered to the future German Edison Company upon certified copies thereof having been made for the other contracting parties.

The period of limitation shall be considered to have been duly observed, provided that within such period the solicitor, Mr. Simson shall have been apprized by the German Consulate either by telegram or in writing that the signatures of the contracting parties ad 2 and 3 shall have been duly affixed, of which notice the latter shall at once inform the contracting parties.

In the event of said co-signature not being furnished within the specified time each of the contracting parties enumerated sub 1 as also 5 to 7 inclusive shall be entitled, without prejudice to their rights, to insist upon fulfilment thereof, to withdraw from these presents by a notification to be delivered in writing to that effect, as provided by Art. 22 of these presents, namely within a fortnight of the expiration of said term of thirty days. Should this right of withdrawal be made use of, then these presents shall also cease to be binding on the remaining contracting parties ad 1 and 5 to 7 inclusive.

Art. 24.

The provisions set forth in these presents, shall so far as nothing to the contrary shall appear from the foregoing, take effect from this day, with the restriction however, that they shall not apply to those obligations with binding force, which shall have been made or accepted by one or other of the contracting parties hereto before the expiration of two weeks from today.

Art. 25.

The contracting parties mutually accept all the foregoing declarations.

Art. 26.

These presents were drawn up in one chief copy and nine supplementary copies. The principal copy was handed ot the National Bank for Germany, one supplementary copy to Messrs. Siemens & Halske, four supplementary copies to Mr. Joshua F. Bailey for the contracting parties ad 2 to 4, and for the purpose of procuring the confirmation in writing (Art. 23), four other supplementary copies to the contracting parties ad 5 to 6, one of which they will foward to the English Edison Company and another for the sake of precaution, and also with a view to procuring the counter-signatures of the contracting parties ad 2 and 3, to New-York.

Executed at Berlin, Mch. 13. '83

No. 1

(aB)

S.B. Eaton's Copy

MEMORANDUM

of

supplementary Agreement

to the principal Contract concluded this day between:

1. The firm SIEMENS & HALSKE of Berlin of the one part, and
2. Mr. THOMAS ALVA EDISON of New York, represented by Mr. JOSHUA F. BAILEY of Paris, at present residing here,
3. The EDISON ELECTRIC LIGHT COMPANY of EUROPE LIMITED of New York, represented by him,
4. The Joint-Stock-Company „COMPAGNIE CONTINENTALE EDISON" of Paris, represented by him,
5. The Banking-House SULZBACH BROTHERS of Frankfort on the Maine,
6. The Banking-House JACOB LANDAU of Berlin,
7. The Joint-Stock-Company „NATIONAL BANK FOR GERMANY" of Berlin, of the other part.

Art. 1.

Messrs. Siemens & Halske have, as they acknowledge, taken cognisance of the Contract, which was concluded on the 29th July 1882 between the Société Electrique Edison of Paris (represented by its administrateurs délégués Messrs.

J. F. Bailey and L. Rau) of the one part, and Messrs. Ungerer & Schulze of Strassburg in Alsace with regard to the position and rights of the latter as exclusive representatives of the Société Electrique Edison for the province of Alsace, i. e. the former Departements Haut-Rhin and Bas-Rhin.

Messrs. Siemens & Halske have, as they acknowledge, further taken notice, that the contracting parties ad 5 to 7, in accordance with their arrangements with the contracting parties ad 2 to 4, are bound to take over and fulfil the rights and obligations arising from the above Contract towards Messrs. Ungerer & Schulze.

Art. 2.

The contracting parties hereto all agree that the fulfilment of the Contract (mentioned in Art. 1) of the Société Electrique Edison with Messrs. Ungerer & Schulze by Mr. Edison and his assigns shall not be considered as a breach in any direction of the main contract concluded between the parties to these presents, as also furthermore that the prices and preferences to be granted to Messrs Ungerer & Schulze in accordance with their aforesaid Contract with the Société Electrique Edison shall have no influence on such prices and preferences, as the contracting parties to these presents, in accordance with their main Contract concluded this day, have granted or still have to grant to one another. The contracting parties however agree that the Contract of 29th July 1882 shall not prevent Messrs. Ungerer & Schulze from also acting on behalf of Messrs. Siemens & Halske within Alsace.

Art. 3.

Should an arrangement be made on the part of the Société Electrique Edison of Paris, or by whoever may in its

stead enter into the rights and duties of the Contract of 29th July 1882, in accordance with Clause 2 of Article 6 about a modification of the prices fixed in Art. 2 of the Contract, or of the commission allowed to Messrs. Ungerer & Schulze in Art. 6 without the special consent of Messrs. Siemens & Halske, any preferences so granted by such arrangements to Messrs. Ungerer & Schulze shall be taken into consideration in determining the discounts and price-rates to be allowed to Messrs. Siemens & Halske in accordance with the chief Contract of today.

Art. 4.

The contracting parties ad 2, 3 and 4 engage to bring about the dissolution of the Contract mentioned in Art. 1, as soon as it is admissible according to its tenor, also to use their endeavours towards attaining an earlier dissolution of said Contract than that admissible by its provisions.

Art. 5.

The contracting parties ad 2 to 4 engage to carry out and bring about that, upon the establishment of the German Edison-Company and as soon as in accordance with Art. 8 of the Chief Contract of today Messrs Siemens & Halske's obligation or right of delivery shall have commenced, all orders given or transmitted by Messrs. Ungerer & Schulze to the Société Electrique Edison of Paris in pursuance of the Contract of 29th July 1882, the execution of which has not been proceeded to, be transferred by the latter to the future German Edison-Company for execution.

Mr. Bailey in his capacity as attorney for the Société Electrique Edison guarantees that this obligation will be fulfilled.

Executed at Berlin, Mch. 13. 83
Mr Bailey unter (Mch. 16) Hat

this contract has "no interest"
for the New York Company –

No. 4.

Contract.

Memorandum of Agreement hereby entered into between

A) the Banking-House SULZBACH BROTHERS of Frankfort on the Maine, the Banking-House JACOB LANDAU of Berlin, and the NATIONAL BANK FOR GERMANY also of Berlin on the one part, and

B) The COMPAGNIE CONTINENTALE EDISON, and the SOCIETE ELECTRIQUE EDISON, both of Paris, represented by Mr. Joshua F. Bailey by virtue of a Power of Attorney from the said Companies dated Paris 23rd February and executed on the 26th February 1883, said, Power of Attorney having been deposited with the Solicitor Mr. A. Simson, on the other part.

Art. 1.

It should be mentioned by way of preface, that two agreements have already been concluded between the contracting parties to these presents, which said Agreements were signed by the con tracting parties B. under date 15th July 1882 at Paris, while the contracting parties A. signed the aforesaid Agreements at various periods in Berlin and Frankfurt on the Maine. According to said Agreements the contracting parties A. have undertaken to establish a Société d'Etudes, for the special purpose of affording the public ocular demonstrations of the value of the Electric Light in various applications. The establishment of said Société d'Etudes, subject to certain conditions more accurately defined in the one Agreement,

and the actual fulfilment of said conditions, grants the contracting parties A. the right to establish a Manufacturing Company within a certain period of time, as set forth in detail in the one of the two above mentioned Agreements (viz. the Manufacturing-Contract) to wit, in such manner, that eventually the contracting parties B. do transfer to the new Company about to be formed a series of rights as specified.

The right of establishing said Manufacturing Company is however, in accordance with the tenor of the said Agreements further combined with the power and authorisation to claim all such rights and to take over such duties, as are laid down with regard to the future establishment of so called Central Stations in the second Agreement (the Central Station Agreement). In both of the two Agreements it is provided that the options granted in both to the contracting parties A. can only be conjointly executed. The period of option has successively been extended by a representation of the contracting parties ad B. finally up to the 14th March 1883.

Art. 2.

The contracting parties A. have however arranged with the contracting parties B. to make various alterations in the Agreements referred to in Art. 1 of these presents. The proposed alterations will affect the amount of the ground or Stock-Capital, the advantages to be granted to the contracting parties B. the inclusion of Alsace Lorraine within the province of licence authorisations, the unification of the aims and objects of the Manufacturing Company and the Central Stations in the hands of one sole Manufacturing and Lighting Company, together with many other separate provisions.

Art. 3.

With a view to effecting these alterations in establishing the projected Manufacturing and Lighting Company, the contracting parties A. have drawn up the Articles of Association annexed hereunto, duly signed by them, said Articles being intended to serve as Articles of Association to the projected Firm, „German Edison Company for applied electricity". With regard to the stock-capital of the said company it is provided that the actual payments (in-

stalments) made thereon up to the expiration of the year 1883 shall have reached a sum of not less than four million Marks.

Now without participating in the establishment of this Company, the contracting parties B. hereby allow, that said Articles of Association contain exactly the arrangement arrived at with the contracting parties A. with regard to the projected Company; they moreover approve and confirm the proviso respecting the settlement of the amount of the Stock Capital. They furthermore accept all financial advantages and interests turned over to them therein, and lastly confirm to the contracting parties A. that by the establishment of the aforesaid Company on such basis, those obligations shall be deemed to have been discharged which the contracting parties A. and B. reciprocally imposed on one another in respect of the Agreements alluded to in Art. 1 of these presents, and in respect of the alterations agreed upon in the latter. In like manner the contracting parties B. undertake the obligations which fall to them in accordance with the Articles of Association hereunto annexed, and agree once more explicitly to confirm the same towards the new Company upon its entry on the Trade Register.

Art. 4.

By conclusion of these presents, the rights of the contracting parties A. as ceded to them on the part of the contracting parties B. in the two Frankfort Agreements (mentioned in Article 1 of these presents) concerning the establishment of a Manufacturing Company, and about the formation of a syndicate for Central Stations, with a period of limitation extending to the 14th March 1883, become of course null and void.

Mr. Joshua F. Bailey hereby declares, that he is duly authorized by Mr. Th. A. Edison and the Edison Electric Light Company of New York to give their consent to these presents and to whatever is granted in favour of the German Edison Company in the annexed Articles of Association concerning which he has also legitimated himself by a telegram received by him from New York from Mr. Edison and the Electric Light Company of Europe Limited, which said telegram he has deposited with the aforesaid solicitor Mr. Simson, and guarantees his due authorisation and powers of

Attorney on the part of the aforesaid parties. In consideration. however, of the exceptional importance of these presents, Mr. Bailey has engaged to procure within a period of thirty days the counter signature to these presents as also to the other contracts mentioned in Art. 13 of these presents on the part of Mr. Th. A. Edison and the Edison Electric Light Company of Europe Limited, in such manner, that the respective signatures of the two latter shall be duly affixed to one or more copies hereof to be forwarded to them by him, particular regard being taken that such signatures shall be duly attested by the German Consul. Such, or a copy furnished with the respective signatures is to be forwarded to the aforesaid solicitor Mr. Simson in order that he, upon drawing up certified copies thereof, the original deed to be furnished to each of the contracting parties may deliver it to the new Company.

The period of limitation shall be considered to have been duly observed, provided that within such period the solicitor Mr. Simson shall have been duly apprized by the German Consulate either by telegram or in writing that the signatures of the aforesaid interested parties shall have been duly affixed, of which notice the latter shall at once inform the contracting parties.

In the event of said so co-signature not being furnished within the specified time, each of the contracting parties ad A. shall be entitled without prejudice to their right to insist upon fulfilment thereof, to withdraw from these presents by a notification to be delivered in writing to that effect, as provided by Art. 13 of these presents, namely within a fortnight of the expiration of said term of thirty days. Should this right of withdrawal be made use of, then these presents shall also cease to be binding on the remaining contracting parties ad A. Furthermore, in the case of such withdrawal, the right of option arising from the former contracts mentioned in Art. 1 shall revive, to wit, in such manner that the period of limitation for exercising such option is hereby fixed at two months from the expiration of said thirty days period of limitation.

Upon punctual receipt of said sanction of contracts from New York the contracting parties A. shall however be bound to carry out these presents immediately by establishing the „German

Edison Company for applied Electricity" and to see that the aforesaid Company do within four weeks after its entry on the Trade Register give the Compagnie Continentale Edison of Paris a written declaration in confirmation of its obligations in pursuance of its Articles of Association.

Art. 5.

For the realisation of the shares of the first Emission, a Syndicate shall be formed, to which the following provisions shall apply:

a. Its term of office shall be one year commencing from the date of the Company's entry on the Trade Register.

b. The management of the Company shall be jointly entrusted to the National Bank für Deutschland of Berlin, the Banking House Jacob Landau also of that city and the Banking house Gebr. Sulzbach of Frankfort on the Maine; the right of becoming a member of the Syndicate shall be reserved to Mr. C. Porges of Paris. The accounts and correspondence shall be conducted by the National Bank für Deutschland, which shall also summon the members of the Management to attend any conferences requisite.

c. Votings shall be carried by a majority; sales at a loss however may not take place if objected to by any one member of the Syndicate.

d. Re-purchases shall be permissible up to one half of the shares already sold for the time being as per balance.

e. As soon as the whole of the shares shall have been sold, the Syndicate shall be dissolved and a settling of accounts furnished to all the parties concerned within four weeks time.

Art. 6.

The following regulations shall apply with regard to the distribution of the profits accruing from the sale of the shares after deducting all costs of issue.

a. First of all the said profits shall be applied to covering the expenses incurred by the Société d'Etude (including those borne by the contracting parties A. and B., which latter shall also include the fees to be paid by the said contracting parties ad A. and B. to the solicitors Dr. Fuld of Frankfort on the Maine and Dr. Goldschmidt of Berlin).

b. Of the balance left, the contracting parties B. shall receive ten per cent. After this deduction the remaining profits shall go to the contracting parties A. who shall divide the same amongst one another in accordance with their special arrangements.

Art. 7.

Apart from the provision made in Clause b. of the foregoing article, the arrangements obtaining with regard to the dissolution and winding-up of the provisional Company Société d'Etude are in no wise affected by these presents. It is moreover expressly stipulated, that so far as the defrayal of the expenses of the provisional Company cannot be affected out of the profits yielded on shares up to the time of the dissolution of the Syndicate, such defrayal must be made by the contracting parties A. and B. — irrespective of any future value of shares — as already heretofore settled between the said contracting parties in accordance with the existing Agreements.

Art. 8.

In the event moreover of the shares of the first issue not being entirely disposed of upon the expiration of the Syndicate, the contracting parties A. hereby grant to the contracting parties B. the right to take over a tenth part of said unsold shares at their own cost-price, i. e. at par plus their share of amount of cost of issue. This right shall lapse, should the contracting parties B fail, — within a fortnight upon receipt of information from the Syndicate as to the number of shares so left unsold, — to avail themselves of such right, by means of a statement in writing, to be addressed to the Syndicate, care of the „National Bank für Deutschland", accompanied by due payment of instalment in respect thereof.

Art. 9.

The contracting parties A. will, upon the establishment of the German Edison Company, offer the latter:

a. to enter into the existing contract relations for the lighting of the Munich Residenz Theatre;

b. to take over the Agents in Alsace hitherto appointed by the contracting parties B., namely, Messrs Ungerer & Schulze of Strassburg in Alsace whose relations in law with the contracting parties ad. B. are defined by Contract dated 29th July 1882, a copy of said Contract being deposited with the Solicitor Mr. Simson;

c. to enter into the Agreement which has been concluded between the firm Messrs Siemens & Halske of Berlin of the one part, and the Contracting parties ad A., the Compagnie Continentale Edison of Paris, Mr. Thomas Alva Edison of New York and the Edison Electric Light Company of Europe, Limited New York of the other part, which said Agreement shall embrace on the one side the rights of Licence of the firm Siemens & Halske in the Patents, (compare Art. 35 of the Articles of Association), as also the dues (royalties) on the other side to be agreed upon for said rights in favour of the German Edison Company for applied Electricity and at the expense of the firm Siemens & Halske.

The contracting parties A. guarantee to those B. that the German Edison Company will accept the whole of these offers. The parties B declare that an Agency-Contract has not been concluded between them and Mr. H. G. Möhring of Frankfort on the Maine, and that actual relations with him have been dissolved.

Art. 10.

The contracting parties B. are empowered to nominate three Members for the first Board of Directors of the German Edison

Company, who must be duly qualified in accordance with the Articles of Association. During their period of office however, the Commissioners of the contracting parties B. (as provided by the Articles of Association) must be one and the same persons.

Art. 11.

With the signing and conclusion of these presents, the Société Electrique retires from its relations in law towards the contracting parties A. by transferring all its rights hitherto acquired towards the contracting parties A., to the Compagnie Continentale.

In as far as in future any question should arise in the fulfilment of the mutual rights and duties, which are to be observed by the Société Electrique towards the contracting parties A., or towards the German Edison Company, the Société Electrique recognizes all dispositions relating thereto made by the Compagnie Continentale as binding on itself.

Art. 12.

In the event of the case arising, as provided for in Art. 49 of the Articles of Association, the contracting parties A. undertake not to make such modifications as may be required by the Judge of Commerce, without receiving special sanction thereto from the Compagnie Continentale of Paris, or from a duly authorized Attorney of theirs here. This sanction must be given, if the amendments do not affect the material relations in law.

Art. 13.

These presents shall stand in material connection with the further contracts hereunder specified, viz: —

I. the Contract specified in Art. 9 with Messrs. Siemens & Halske of Berlin, and

II. the Contract mentioned as supplementary to I concerning the Agents Ungerer & Schulze of Strassburg,

and the contracting parties to these presents hereby mutually acknowledge, that the non-signing of one of the aforesaid contracts on the part of one of the parties thereto, within four days counting from 13th March 1883 shall entitle anyone of the contracting parties to these presents to withdraw from the same and do so by an immediate notice to that effect in writing to be addressed to Mr. A. Simson, Solicitor of Berlin, as being authorized by all the contracting parties to receive any such notifications.

Art. 14.

The contracting parties mutually accept all the foregoing declarations.

Art. 15.

These presents were drawn up in one chief copy and nine supplementary copies. The principal copy was handed to the National Bank for Germany; five supplementary copies to Mr. Bailey, viz. one for each of the contracting parties ad B., one for the purpose of procuring the confirmation thereof in writing from New York (Art. 4) one to be left with the parties concerned in New York, and one for delivery to Messrs. Siemens & Halske; four other supplementary copies to the Banking-Houses Messrs. Sulzbach Brothers and Jacob Landau, who will hand one of them to the German Edison Company and forward another for the sake of precaution to New York, likewise for the purpose of procuring counter-signature in accordance with Art. 4 of these presents.

No. 4. S. B. Eaton's Copy

XX

Memorandum of Agreement

entered into between

1. The Banking-House **Gebr. Sulzbach** of Frankfurt on the Maine,
   Jacob Landau of Berlin,
   the **National-Bank for Germany** of Berlin

on the one part, and

2. The **Compagnie Continentale Edison,** and
   The **Société Electrique Edison,** both of Paris,
   represented by Mr. **Joshua F. Bailey** as their Attorney,

on the other part, as supplement to the Contract concluded this day between the selfsame parties.

Art. 1.

In the Articles of Association, on the basis whereof the German Edison Company for applied Electricity is to be established, it is provided, that an alteration of the aim and object of the Company, or its amalgamation with another Company, or its dissolution cannot be resolved upon within the first ten years of the Company's entry on the Trade Re-

gister without the consent of the **Compagnie Continentale Edison**, except in such cases as are provided for by law, or in the event of fifty per cent. of its Stock-Capital having been lost (vide Art. 4 and 31 of the said Articles of Association).

Art. 2.

The **Compagnie Continentale** now, with the consent of the **Société Electrique Edison** hereby engages towards the contracting parties hereunto of the first part, in the event of the future **German Edison Company** demanding it, to forego the right of interdiction vested in it the said Compagnie Continentale Edison, as specified in the preceding Art. 1. of these presents, in the event of the Contract entered into on the 13. March 1883 between the firm **Siemens & Halske** of Berlin of the one part and Mr. **Thomas Alva Edison** of New-York, the **Edison Electric Light Company of Europe lim.** of New-York and other interested parties of the other part, no longer being in force upon the expiration of six years after the registration of the **German Edison Company** on the Trade Register —, provided moreover that at the same time one of the eventualities herein after specified should have arisen or should arise, viz:

1) Whenever the **Compagnie Continentale Edison** of Paris shall cease to be the proprietor of at least three hundred Founders-Certificates of the German Edison Company (vide Art. 11 of the said Articles of Association), or

2) Whenever moreover the industrial exploitation of the Edison incandescent-lighting shall become impracticable in consequence of a new invention, or whenever the industrial

exploitation of the electric lighting of towns by means of a general distribution of the energy of the electric current through a system of conductors similar to that now applied in New-York shall prove infeasible, in consequence of the invention of a method of independent electric lighting of single houses.

Art. 3.

This present Agreement, as an integral part of the Contract concluded on the 13. March 1883 between the Compagnie Continentale, the Société Electrique and the Syndicate, has, in view of Art. 20 of the aforesaid Agreement entered into between the firm Siemens & Halske of the one part and the several contracting parties of the other part, — been submitted to Messrs. Siemens & Halske, who in token of their cognisance thereof have appended their signature thereto.

Art. 4.

These presents have been drawn up in one chief and six supplementary copies; each of the contracting parties, as also Messrs. Siemens & Halske to be provided with a copy, and a further copy to be given to the National Bank for Germany for delivery to the German Edison Company.

Executed at Berlin, Mch. 13. 83

Mr Bailey writes (Mch. 16) that this is a "secret contract, made to satisfy doubts of one of the German banking houses". It is made refer=

arately, so as not to appear when the main contract is adopted as a precedent for other coun=ties –

[MARCH 13, 1883]

Articles of Association

of the

German Edison Company

for

applied Electricity.

Section I.

General Provisions.

Art. 1.

Under the style and firm „Deutsche Edison Gesellschaft für angewandte Electricität", a Joint-Stock-Company is established by virtue of these presents.

Art. 2.

The Company shall have its domicile in Berlin; it may however remove the same to any other place in Germany. The Company is authorised in pursuit of and for the attainment of its objects, and within the limits prescribed in Art. 3, to erect Branch-Establishments and agencies of every description at home and abroad, and may participate either as a sleeping or joint-proprietor in private Joint-Stock-Companies, or as open partner in any other kind of trading-firm, or do so by subscribing to Stock or other shares or certificates of a like character in any public or private Joint-Stock-Company or firm.

Art. 3.

The object for which the Company is established is to make every industrial exploitation of:

I. All the Patents granted in Germany to Mr. T. A. Edison of New York or of German Imperial Patents still to be granted to him, inclusive of all Improvement or Supplementary Patents in respect of the measurement, distribution and application of Electricity for lighting and the transmission of energy.

II. of all inventions in the province of lighting by arc-lights.

For incandescent lighting the Company may only exclusively employ the Edison-System; for the Arc-light lighting it may use any system it chooses.

The Company may acquire patents, rights of exploiting patents, together with all rights in or appertaining thereto concerning the application of technical processes, inventions and secrets but only with the sanction of the Compagnie Continentale Edison of Paris. Besides the Company shall, in its industrial pursuits be guided by the provisions in Art 35 ;

Art. 4.

The Company can not be dissolved before the expiration of 50 years, unless in cases provided for by law, or in the event of fifty per cent. of its stock-capital having been lost.

Otherwise its duration is not limited to any distinct period.

Section II.

Stock-Capital and Shares.

Art. 6.

The Stock-Capital of the Company shall be five million Mark, divided into ten thousand shares of five hundred Marks. Increases of Stock-Capital up to ten million Marks shall be admissible upon a resolution of the Board, increases beyond that sum upon a resolution of the General Meeting up to any

amount. It may also be resolved, in order to increase the Stock-Capital to issue Preference-Shares, which shall enjoy a preferential right to dividends, and a preferential claim to settlement out of the estate in the event of the Company being dissolved, subject however to the provision, that the right of the Founders Certificates to a participation in the net profits of 35 per cent., after allotment of an annual dividend of six per cent. on the whole of the paid-up Stock and Preference Capital, may not be curtailed.

At every new issue of shares, the shareholders for the time being shall be entitled to take over such portion of the fresh issue, as shall fall to them in proportion to their share-property, at the price fixed by the Board. This privilege must however be made use of within a prescribed term, to be determined by the Board, which said period shall not be less than fourteen days and be published in the Company's newspapers, failing which said privilege shall lapse. In cases of partial joint-ownership the Board shall determine the mode of settlement and also decide upon the time, mode and terms of the issue.

Art. 7.

Fifty percent shall be immediately paid up on all shares of first issue of 5 million marks. The balance on shares of the first issue is to be paid up before the end of the year 1883. In subsequent issues the subscribers may, by a resolution of the Board, on payment of forty per cent. be released from liability for further instalments, and interim certificates, made out to bearer, be issued on shares. Further calls will be made by the Board, which shall also determine the amounts and periods of payment. The Board shall also be authorised to demand payment of the whole of the balance of instalments at one time.

Art. 9.

In so far as payment in full shall have been decided upon by the Board prior to the issue of shares, Interim-Certificates, made out to bearer, shall be issued for paid-up calls. Upon full payment of the nominal amount having been made, shares, to bearer, shall be issued upon delivery up of the Interim-Certificates; to the shares, bearing consecutive numbers, and like the

interim-certificates, showing the facsimile of one of the members of the Management, a member of the Board, and initialed by a Controlling-Officer, shall be attached coupons for five years and talons, each entitling the owner to a further series of coupons with talon.

For the rest, the form and tenor of the interim shares, coupons and talons shall be determined by the Board.

The Company shall be entitled but not obliged to test the legitimacy of parties presenting coupons and talons.

Art. 11.

The company shall issue 2500 Founders-Certificates, made out to name, and indorsed to order, which shall not confer upon the owner any rights of a shareholder, but merely on the contrary entitle him, upon delivery up of the coupons thereto, to a pro rata share of 35 per cent. of such surplus of the net profits as shall remain after payment to the shareholders of a dividend of six per cent. upon the paid-up Capital for the time being.

The provisions of Articles 9 and 10 shall be similarly construed in their application as regards Founders-Certificates and coupons and talons thereto.

For the rest, the tenor and form of the Founders-Certificates, as also of their coupons and talons shall be fixed by the Board. The Founders-Certificates shall be entered in a special book of the Company kept for that purpose, with an exact specification of the number and owner, together with his name, profession and residence.

In the case of a Founders-Certificate changing hands, this must be recorded in the respective book, when the Certificate in question must be submitted to the Company, together with the proof of transfer.

Only such persons shall be considered as owners in relations with the Company, as are entered as such in the Company's books. The Company shall be entitled but not obliged to test the genuineness of transfers, as also the legitimacy of the presenter of Founders-Certificates or coupons and talons thereto.

Art. 12.

The Founders-Certificates, provided for in Art. 11 shall be distributed as follows:

1. The first subscribers to shares of first issue shall receive one Founders-Certificate for every ten shares subscribed to, thus making in all one thousand of them.
2. The Compagnie Continentale and the Société electrique in Paris shall receive the remaining fifteen hundred in consideration of the cession of certain rights specified in Art. 35 and Art. 36, and without prejudice to the further royalties granted to the said Companies there according to their statutes.

Art. 13.

In the event of the Company being wound up, 35 per cent. of the proceeds of liquidation in excess of the amount of the paid-up share-capital, shall be distributed among the owners of Founders Certificates in proportion to their shares.

In the event of the amalgamation of the Company, — (which shall only be admissible with the consent of the Compagnie Continentale in accordance with Art. 31) — with another company, and provided the new company thus created shall not sanction the continuance of such Founders-Certificates by extending their privileges to the whole of the Company, the new Company shall be authorized to compound with the owners of such Certificates by a payment of twelve and half times the amount of the annual average returns on such Certificates for the past years. The owners of Founders Certificates shall be obliged to submit to one or other of these two modes of satisfying their claims.

Notices of redemption of Founders-Certificates, to be accompanied by a definition of the mode of redemption must be given, together with the appointment of a definite term for presentation of not less than three weeks, to wit: by means of three successive notices with not less than a week intervening between each.

At the end of a year after expiration of the term of presentation, every claim to compensation and every right accruing

from Founders-Certificates, till then unpresented for redemption, shall lapse, and said certificates become valueless.

The coupons and talons of Founders-Certificates, which have not become due, shall already become valueles upon the publication of their withdrawal.

Should the loss of a Founders-Certificate be reported and attested before the expiration of the specified year, the Board may, on the expiration of the year, pay to the registered owner in the Company books such compensation, even without a previous declaration of annulment.

Section III.

The Management.

Art. 14.

The Management (Managing Director or Managers) shall have all the rights and duties, which legally appertain to the Management of a Joint-Stock-Company.

The Management shall consist of one Manager or several members, who shall either be duly appointed Managers or delegates of the Board (Managing-Directors).

The Board shall elect the members of the Management and determine and regulate the composition of the Management and the number of its members.

As long as a member of the Board is delegated into the Management, his functions in the Board shall lapse.

The appointment of the Members of the Management shall be notarially recorded, and must like their retirement be published in the Company's newspapers.

The members of the Management shall be legitimated by an attestation of the competent Court, or by an extract from the Trade-Register.

Art. 15.

All declarations binding the Company must, in order to make them binding on the Company, be signed by two persons duly authorised to represent the Company, to wit:

a) Either by two members of the Management, or
b) by one of the Management in conjunction with a clerk duly furnished (as shall appear from the notarial minutes and record thereof) with powers of procuration by the Board.*)

Art. 16.

The Management shall be bound by the provisions of the Articles of Association, the resolutions of the General-Meeting and the instructions of the Board, or its Committee (Art 17).

The relationship of the Managers to the Company shall be determined by the contracts to be concluded between them and the Board.

Section IV.

The Board.

Art. 17.

The Board of the Company shall have all the rights and duties, which legally appertain to it, together with those expressly attached to it by virtue of these presents.

The Board, amongst its other powers, authorities and discretions, shall appoint the members of the Management and such of the Company's officers, whose salary shall exceed 3000 Marks per annum, or who, by contract are to receive extra remuneration by way of participation in the profits.

The Board must give its sanction to all purchases of real estate, mortgaging of same, and issues of bonds.

The Board shall determine and regulate the establishment and closing of any branches or agencies whatsoever, the Company's entrance or retirement as open or sleeping partner into or from any public or private company or trading-firm, or its participation by subscribing to any stock or other description of shares in such Companies or firms.

The Board may permanently delegate to any of its members its powers (to be revocable) of supervision and control, together with the contingent exercise of its rights of protest, entirely or for certain spheres of its business. The Management shall be bound by the instructions of such permanent Committee, similarly to those of the entire Board.

*) Some formalities concerning mode of organizing are omitted here.

Art. 18.

The Board shall be elected from out of the number of the shareholders by the General-Meeting by an absolute majority, and shall consist of not less than seven nor exceed fifteen directors. The first Board shall hold office until the first ordinary General Meeting to be held in 1884, and in no case for more than a year. From thenceforward the Board shall always be elected for periods of five years. Retiring members shall always be re-eligible. The election shall be taken to be declined if the person so elected shall fail to notify in writing his acceptance of such office within a fortnight of its publication.

Art. 20.

The share qualification of a director shall be his being the registered holder of ten shares of the Company to be deposited with the company during his term of office.

Art. 21.

The members of the Board (directors) shall receive a participation in the net profits as provided in Art. 33.

This commission shall at the same time constitute their remuneration for their services up to the ordinary meeting of the following year.

The question of the remuneration of the first Board shall be determined by the ordinary General Meeting to be held at the expiration of the first business year.

Art. 22.

The Board shall annually elect a Chairman and a Deputy Chairman of which a notarial protocol shall be drawn up. The Board shall as a rule meet at least once each quarter of a year and shall determine and regulate its own mode of procedure.

Resolutions, unless where otherwise provided for by these presents, shall be decided by an absolute majority of votes. In

the case of equality of votes, the Chairman shall have a casting vote.

The members of the Management, shall if requested to do so, attend the Meeting of the Board.

Both in urgent and ordinary cases the assent to a motion may be obtained by means of a circular, the Chairman ultimately deciding whether there is any occasion for doing so.

Section V.

General Meetings.

Art. 23.

The General Meeting shall be called by the Board; the Board shall give at least a fortnight's notice (to be published once in the Company's newspapers) of any such meeting, such notice specifying the business to be transacted thereat.

Art. 24.

Every Shareholder shall be entitled to attend General Meetings, but only a shareholder holding not less than five shares shall be entitled to vote without prejudice to the provision in Art. 31, Clause 2. Every five shares shall entitle the holder to one vote. The resolutions of the General Meeting shall be unconditionally binding on the individual shareholders.

Art. 26.

The ordinary General Meeting shall be held regularly at the domicile of the Company in the first four months of every calendar year.

An extraordinary General Meeting may be called whenever the Board shall think it necessary, and must be called, and be held within six weeks, whenever a requisition of one or more shareholders, holding not less than one-fifth of the share-capital issued, and stating fully the object of the meeting and the reasons for demanding it to the Board be delivered and left at the office of the Company or at any other place appointed by the Board, together with the deposit of shares on the part of such requisionists.

Art. 27.

The General Meeting, apart from those objects mentioned in Art. 30, shall adopt its resolutions by an absolute majority of votes; in cases of equality of votes, the Chairman shall have a casting vote.

Art. 28.

The ordinary General Meeting shall deliberate and determine on the annual Report, the passing of the annual accounts and balance-sheet, the assessment of the net profits together with their distribution, as also on the discharge (indemnity) to be granted to the parties concerned on auditing and passing the accounts, and shall conduct the requisite elections.

Art. 29.

Whenever a requisition in writing from any number of shareholders, holding in the aggregate not less than 250 shares is delivered, it must be placed on the Order of the day of the General Meeting, provided it is left at the office of the Board, together with the deposit of the shares, not less than three weeks prior to such meeting.

Art. 30.

The General Meeting shall furthermore decide with binding force on all the Shareholders of the Company:

1. On the removal of the domicile of the Company;
2. on other alterations of these Articles of Association and also in particular:
3. on an increase of the Stock-Capital beyond 10 million Marks;
4. on every kind of reduction of the Stock-Capital, and in particular by the re-purchase of its own shares, and indeed on every way of diminishing the Stock-Capital;
5. on any alteration of the aim and object of the Company, and on the amalgamation of the Company with any other one, either by taking over another Company into this or vice versa;
6. on the dissolution of the Company (Art. 4).

Art. 31.

The resolutions aforementioned in Art. 30 shall however be subject to the following closer provisions:

The resolutions enumerated in Clauses 1, 2, 3 and 4, in order to make them valid, shall require a majority of two thirds of the votes given; the resolutions comprised in Clauses 5 and 6 shall only be valid, subject to the provisions resulting from the following stipulation of the paragraph of this article and shall moreover only then become valid when, either not less than one half of the shareholders being present at the General Meeting, the respective resolution be passed by an absolute majority of votes; or in the event of less than one half of the Share-capital being represented, not less than three fourths of the votes given must be in favour of such resolution. In addition to this, in passing resolutions on these matters every share shall entitle to a corresponding vote.

The General Meeting, which shall resolve upon the dissolution of the Company, shall also appoint the Liquidators and determine the time, mode and terms of the winding up. An alteration of the aim and object of the Company, or its amalgamation with another Company or its dissolution cannot however be resolved upon within the first ten years of the Company's entry on the Trade Register without the consent of the Compagnie Continentale, except in such exceptional cases as are provided for in Art. 4. Nor shall said resolutions be admissible after such date, without the consent of the Compagnie Continentale as long as the essential Imperial German Patents of Mr. Edison and the Light Company in respect of incandescent light shall be in force. In the event of any dispute arising as to the signification of the term „essential" a Court of Arbitration consisting of five persons shall decide thereon, said Court of Arbitration to be elected as follows:

Each party shall be entitled to nominate two arbitrators. The appointment of the fifth arbitrator shall lie with the Elders of the „Berlin Merchants Corporation" or with any other body or authorities which may take its place. Each party shall give the names of its nominees to the other party not later than two weeks from the date of being called upon to do so, failing which the defaulting party shall forfeit his right to nominate.

The two arbitrators to be nominated by the defaulting party shall be replaced by two other arbitrators to be appointed by the aforesaid corporation or substitute thereof.

The Court of Arbitration shall be free to decide as it sees fit, and shall not be bound by any formal regulations.

The Court of Arbitration shall publish its verdict to the parties within a reasonable time.

The following provisions of these presents furthermore shall not be altered without the consent of the Compagnie Continentale: Art. 3, last alinea but one, Art. 4, Art 11 first alinea, Art. 12, Art. 13 alinea 1, Art. 31 in as far as it treats of the consent of the Compagnie Continentale to certain resolutions of the General Meeting; Art. 33, as far as it refers to the beneficial interests of the owners of Founders certificates, finally Articles 35—46 inclusive.

The rights of protest granted to the Compagnie Continentale in this present Article as also in general those, comprised in these presents, and more particularly those comprised in Articles 3, 13 and 46 shall all lapse whenever the Company is dissolved, its transfer to other parties or Companies being inadmissible.

Art. 32.

An alteration of the several provisions laid down in Art. 31 respecting the validity of the resolutions of the General Meeting mentioned therein, can only take place upon the same suppositions and subject to the same conditions as those prescribed for the passing of the respective resolutions.

Section VI.

Balance-Sheet, Division of Profits, Reserve Fund.

Art. 33.

The Calendar year shall be the business year. The first business year shall comprise the term from the establishment of the Company to the expiration of the year 1883. The acounts shall be closed annually with the 31st December, and the Balance-Sheet drawn up.

The surplus of all assets over the liabilities inclusive of the Stock-Capital and the Reserve-Fund, shall constitute the net Profits, to which latter the prescriptions of the Statutory Law shall apply (Commercial Code Art. 31 and 239a).

The net profits, as shown by the balance sheet, shall be appropriated as follows:

1. To the payment to shareholders of a dividend at the rate of six per cent. per annum on the calls paid up. Of the remainder of such surplus then left thirty five per cent. shall be paid to holders of Founders Certificates.
2. Of the then remaining surplus five per cent. at least shall be set apart for the Reserve Fund, however only so far and so long as the Reserve Fund shall not have reached the amount of one-tenth of the Share-Capital for the time being.

   Ten per cent. of such surplus shall be distributed among the Directors and the Commissioners respectively (mentioned in Art. 45) by way of a commission. Such surplus shall furthermore serve to defray the amounts of participation in profits to be paid to the managers and other officers of the Company in accordance with their terms of engagement.
3. The remainder of such surplus shall be available as a farther dividend (superdividend) among the shareholders in such manner as the General Meeting may direct.

Dividend and Super-Dividends shall be payable on the 1st of July at latest.

Art. 34.

The Reserve Fund shall, like the Stock Capital, be applied to the business of the Company as prescribed by these presents, and shall not bear interest. The General Meeting may resolve to meet extraordinary losses or expenses out of this fund.

Section VII.

The Company's position in law to the Compagnie Continentale Edison as also to Mr. Thomas Alva Edison and the Edison Electric Light Company of Europe Limited of New-York.

Art. 35.

The German Edison Company for applied electricity shall acquire from the Compagnie Continentale of Paris, with the sanction of Mr. Thomas Alva Edison and the Edison Electric Light Company of Europe Limited of New-York, subject to the provisions of Clause 209 b of the German General Commercial Code, the exclusive right of industrial exploitation of the inventions of Mr. Edison and the aforesaid Electric Light Company specified in Article 3, to wit for the whole of Germany, and in particular the following rights as exclusive right.

1) The right to manufacture or have manufactured in the workshops of foreign Edison Companies all machines, apparatus, utensils and materials employed in the Edison system, as specified in Art. 3 of these presents, no matter whether patented or not, while the manufacture in other factories shall only be permissible as long as the Compagnie Continentale shall exist with its sanction; furthermore to procure and to sell the said articles;

2) the right to erect installations for purposes of lighting and transmission of energy; or to cede the rights in connection herewith to other parties;

3) the right itself to employ the articles specified above in clause 1 & 2, as also that of granting said right of use to third parties.

Mr. Edison, the Electric Light Company and the Compagnie Continentale in granting the said licenses do not undertake any further guarantee with regard to the patents beyond that of their present existence. — The right of manufacture (Clause 1) shall also extend to machines, apparatus, utensils and materials employed in electric railways-lines, not however to their application.

The Company shall only be restricted with regard to its industrial action and pursuits (Art. 3) and respecting the right ceded to it as above, by such rights as have been ceded to Messrs. Siemens & Halske of Berlin in pursuance of the two Contracts entered into between Messrs. Siemens & Halske and Mr. Edison and the Edison Electric Light Company, the Compagnie Continentale as also any other partners, while on the other

hand, the rights ceded in the aforesaid contracts to Mr. Edison, the Electric Light Company and their assigns shall of themselves pass over to the German Edison Company, provided the latter shall deliver into the hands of Messrs. Siemens & Halske a declaration of Acceptance within a period not later than four weeks after its entry on the Trade Register.

The amount of the purchase-money to be paid in cash out of the funds of the Company to the Compagnie Continentale of Paris in respect of the above specified rights, shall be three hundred fifty thousand Marks. An amortisation of this sum shall take place in such manner, that the Compagnie Continentale shall forego the royalties granted to it in Art. 41 of these presents until such time as they shall have reached the amount of 350,000 Mark. In the measure, in which this amount accrues from the business of the Company, it shall flow into the assets of the latter, while the purchase-money for the rights acquired thereby in accordance with the foregoing may only always be entered on the Balance-Sheet with the correspondingly reduced amount, until at latest, having reached the whole sum, it disappears entirely from the assets.

In addition to the abovementioned 350,000 Marks, those other beneficial interests, granted elsewhere to the Compagnie Continentale (compare Art. 12 & 41) shall be deemed equivalents for the rights acquired in accordance with this Art.

Art. 36.

The Compagnie Continentale in Paris undertakes to apprise the Company for Germany and the Company alone of all patented and unpatented inventions, improvements and results of experiments connected herewith, which are already at Mr. Edison's, the Edison Electric Light Company's or its own disposal for electric lighting or transmission of energy, or which Mr. Edison the Electric Light Company or the Compagnie Continentale itself may become possessed of up to the 15th. November 1886, and to communicate them to the whole extent of the several processes specified in

Art. 35; all this for Germany and to aid and assist the Company in its working in every way in such wise, as to enable it to carry out its manufacture with the same degree of technical perfection as the Compagnie Continentale itself.

In particular the Paris Company shall be bound to furnish the Company at the latter's expense, with suitable instructors. The German Edison Company shall be reciprocally bound in all these respects.

Art. 37.

As soon as the Company shall have been entered on the Trade-Register, the Compagnie Continentale shall hand over to it such powers of attorney of Mr. Edison and of the Light Company of New-York, as it may require to prosecute any measures both within and without law on account of any infringement of the rights to be transferred to it by virtue of these presents.

The right secured to Mr. Edison and the Light-Company in the Contract of 15th November 1881, with the Compagnie Continentale of accessorily participating in any action at law to be taken on account of unlawful imitations of patented inventions of theirs, as also in any other suit at law and system of administration, which may be set in motion at the instance of the lesees or holders of said licences, is hereby expressly reserved to Mr. Edison and the Light Company.

Art. 38.

The German Edison Company engages on its part, at its own cost to look after the protection of the Edison Patents in question, and instantly to inform the Compagnie Continentale in Paris of any infringement of the respective patent-rights which may come to their knowledge. Should legal measures become necessary for the protection of said patents, compromises therein may only be concluded with the sanction of the Compagnie Continentale.

Art. 39.

The Compagnie Continentale shall at all times, upon conditions of reciprocity, be obliged to place the several deeds and

documents requisite for the purposes mentioned in Art. 40 at the disposal of the Company at its domicile.

Art. 40.

In the event of the dissolution of the Company, in particular in the event of its winding-up, the patent-rights transferred to it, in as far as they may be in force at such time, shall relapse to the Compagnie Continentale Edison in Paris gratis.

Art. 41.

Besides the profits (beneficial interests) mentioned in Art. 12. granted by the Company to the Compagnie Continentale Edison the Company is bound semi-annually upon balancing its accounts, to discharge the following royalties to the Compagnie Continentale, payable at its cashier's office:

a) On every lamp used or sold by the German Edison-Company or parties holding licences from them or by Messrs. Siemens & Halske by virtue of the Contract mentioned in Art. 35, independently of their light power, 16⅔ per cent of the cost price for the time being, at which the German Edison Company manufactures its lamps or procures them from a foreign Edison Company; in no case however more than 25 Pfennige; such lamps however as Messrs Siemens & Halske, as also the German Edison Company themselves shall use within the province of their own business and manufacturing premises in accordance with the foregoing Contract to be exempt from this royalty.

b. A royalty for every incandescent lamp lighting execute d within the German Empire by the German Edison Company or their holders of licences, or by Messrs. Siemens & Halske by virtue of the contract aforesaid; this royalty shall be paid for every machine-horse-power equal to 75 Kilogram metres per second actually used in such incandescent lamps. The amount of

horse power to used in lamps shall be determined in accordance with the electrical system of measurement.

The royalty on an installation shall accordingly amount to 12½ Marks per horse-power for the first 50 horse-power and for every horse-power beyond that 16 Marks; said royalty shall not be paid on extraordinary installations of a merely transient nature. In installations of mixed (incandescent lighting and arc-light-lighting) the royalty shall only be paid for the horse-power consumed in the incandescent lamps.

Royalties in respect of the lamps and dynamo machines so used or sold by the Company shall be due at the end of the current half year, while these royalties on lamps and dynamos sold by Messrs. Siemens & Halske in pursuance of the aforementioned Contract as also by any of the Company's holders of licences shall be discharged every time immedintely on receipt. The German Edison Company will furnish the Compagnie Continentale of Paris with a monthly return of current-producing machines applicable for incandescent lighting sold in Germany by them or by their holders of licences or by Messrs. Siemens & Halske, giving full details.

This royalty shall however only be paid once on each horse power and on each lamp used in incandescent lighting.

Art. 42.

As long and in so far as the Company shall not be in a position itself to manufacture the machines, apparatus, utensils and materials or any portions of them, employed in the installation of the Edison incandescent Light-System, or have them manufactured by Messrs. Siemens & Halske, such period however not to exceed the duration of a year, the Compagnie Continentale and the Société Electrique of Paris shall furnish the Company, at cost-price, with all the machinery, apparatus, utensils and materials requisite in any manner whatsoever in applying the Edison system.

The lamps shall form an exception here, it being agreed that they shall be supplied to the German Company at the same price as to the Compagnie Continentale and the Société électrique of Paris, viz. f. o. b. New-York.

Art. 43.

The Compagnie Continentale engages to furnish the German Edison Company at the cost of the latter with the necessary staff of hands for the construction of installations or Central-stations, in particular the technical staff.

Art. 44.

The Compagnie Continentale will at all times punctually pay to the German Patent Office all fees due on the patents specified in Articles 3 and 36, and forward the respective receipts for such payments to the German Edison Company not later than a month before the expiration of the last term of grace allowed.

Art. 45.

The Compagnie Continentale of Paris shall be entitled to appoint two permanent commissioners to guard its rights and interests towards the Company.

The said Commissioners, in as far as they are not members of the Board, shall be admitted to the participation of the latter in the profits, and shall enjoy, in as far as it is a question of protecting the contract-rights of the Compagnie Continentale, all the rights of revision and control conferred on the members of the Board.

Art. 46.

The provisions of this Section of these presents cannot be altered without the sanction of the Compagnie Continentale of Paris.

Art. 48.

The original (constituting) General Meeting, irrespective of its other statutory powers, have the right to determine upon the entry of the Company into the Contracts specified in Art. 35. It shall moreover elect the Auditors and seven or more members of the Board, who, if not less than seven of them be present, shall forthwith, and without giving the absent members notice of their election, or inviting them to attend, be authorised to proceed to elect the Managers, and Managing-Clerks holding powers of procuration, as also to elect the Committee and organise it by

appointing its Chairman and Deputy Chairman, finally moreover to delegate members of the Board temporarily or permanently into the Management.

Art. 49.

Should these presents, in order to qualify them for due entry on the Trade-Register, need any modifications, such members of the Board as are recorded in the Minutes of Proceedings of the first constituting General Meeting as residing in Berlin, shall be authorised to make the requisite alterations, and submit them to the Judge of Commerce. The original subscribers shall one and all submit to such alterations. Members of the Board may, to this intent, allow themselves to be mutually represented by a simple power of attorney for substitution, so that it may even suffice, if only one of said members of the Board, furnished with powers of substitution from the others, make such alterations.

1883-03-16

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ELECTRICITÉ

Grand Diplôme 459
d'honneur
PARIS 1881

Ivry-sur-Seine, le
16 Mch 1883.

Thos. A. Edison Esq
New York

My dear Edison,

Your letter of 3rd Mch to hand.
I have no contract with the companies here, but it is generally understood that it would take me about 3 years to get things under weigh. ~~here~~ Everything goes well along as I continually boost it but if I should leave here ~~before~~ we have a Central Station working in Paris I really believe it would go to the devil. I shall be over this Spring for about a fortnight to clean all I can before starting the Station here, and then if necessary we can talk it over.

Yours as ever

Chas Batchelor

1883-03-16

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ELECTRICITÉ

Grand Diplôme 457
d'honneur
PARIS 1881

Ivry-sur-Seine, le
16 Mch. 1883

Mr A Edison Esq
Newyork

My dear Edison,

Your cables to hand as follows:—

14 Mch. "Can file 59 if patent for 15 years and full fee paid otherwise jeopardize american patent."

also:—

15 Mch.:— "Bergman urgently needs work. greatly improved socket 10 per cent cheaper try send orders"

As regards the first the full fees will be paid of course —

As for second I will try and do something in a day or two

Very truly yours:

Chas Batchelor

1883-03-17

Form No. 3.

CABLE MESSAGE.

THE WESTERN UNION TELEGRAPH COMPANY.

All CABLE MESSAGES received for transmission must be written on the Message Blanks provided by this Company for that purpose, under and subject to the conditions printed thereon, and on the back hereof, which conditions have been agreed to by the sender of the following message.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY		CHECK
21	M	Cm	Berlin	82.

Received at FILED AT 854 BROADWAY, March 17 1883.

To Edison N. Y.

Edison 65 5th Ave

Einverstanden. Edison

G

Mar 23/83

Vienna

1883-03-22

8 Schwedengasse
Brünn
3/22/83

S. Gravell Esq
N.Y.

My dear Sir

I have received your favor of the 6th instant and offer my thanks. You may tell Mr Bahan that I am about to start a small company here in order to protect the Patents. Also ask him if he would not like to send me a pair of his microphone telephone as I should like to exhibit them here in Brünn and show them how to use the speaking telephone as it would increase the experiments, demand being. I should like to try some experiments with it in the theatre.

Yours very truly
Franz Jahn

1883-03-22

Quad

Mr. Edison

Quad

Edison Batchelor

Quad

Quad

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ÉLECTRICITÉ

Grand Diplôme d'honneur

PARIS 1881

Ivry-sur-Seine, le 22me March 1883

5, RUE DU PARC.

Mr. A. Edison Esqr.

65 & 67 Fifth Avenue.

New York.

My dear Edison.

I have collected from Faubel 250 francs for your account; please debit my a/c with $48.65.

I acknowledge your cable of today as follows

"Italian credit urgently needed"

"Cable $2000 accounts mailed twelfth."

The Sté Industrielle calls you today $2000 and will of course notify you of it.

Yours faithfully.

Chas Batchelor

1883-03-24

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

Grand Diplôme d'honneur PARIS 1881

Ivry-sur-Seine, le 24 March 1883

My dear Edison,

When in Berlin I bought for you the back numbers of the "Elektrotechnischer Zeitschrift" which are being bound there and which I shall send you when I get them — It was also apparent to me that they would like to have you a member of the "Electrotechnischer Verein" and that Dr Werner Siemens would propose you — I therefore procured a form, and if you will please sign your name where I have put I. A. C. in lead pencil, & then direct it to Emil Rathenau 5 Eichhorn Strasse Berlin he will see to the rest of it — It will secure you a copy of the journal every year

Yours "Batch"

1883-03-24

Form No. 3.

CABLE MESSAGE

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY		CHECK
12	R	R	9 Berlin	7331

Received at FILED AT 854 BROADWAY. Mch 24 1888.

To Edison ny
Edison 65 Fifth avenue

Depeschiret ob Speyer
Oder Seligmann Trasirt

Edison

Franchetton.

Telegraph if Speyer or Seligmann drawn.

1883-03-25

Form No. 3.

CABLE MESSAGE

THE WESTERN UNION TELEGRAPH COMPANY.

All CABLE MESSAGES received for transmission must be written on the Message Blanks provided by this Company for that purpose, under and subject to the conditions printed thereon, and on the back hereof, which conditions have been agreed to by the sender of the following message.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY		CHECK
250	in h	9	Berlin	154

Received at FILED AT 854 BROADWAY. Mchr 1888.

To Edison Ny
65 5 ave

Trassiret 3200 nicht brief folgt.

Edison

Do not draw 3200, – letter follows.

1883-03-28

SOCIÉTÉ ÉLECTRIQUE EDISON
SOCIÉTÉ ANONYME
Au Capital de 1 million de francs

EXPOSITION INTERNATIONALE D'ÉLECTRICITÉ
Paris 1881
GRAND DIPLOME D'HONNEUR

ADRESSE TÉLÉGRAPHIQUE
EDISON, PARIS

Paris, le March 28. 1883.

33, Avenue de l'Opéra

Thos. A. Edison Esq
New York.

Dear Sir,

We beg to enclose herewith translation of a letter received from the Italian Committee referring to the last invoices sent to them and amounting in total to about $ 9600. In consequence of these contracts the Italiano have only opened credit of $ 3325. as we have cabled to Mr. Wallerstein yesterday and we are waiting for your answer to the enclosed letter before making further reclamations in Milan.

We have opened further credit for shipments to be made for our account, and we understand that Mr. Wallerstein has paid you about $ 3000.

1883-03-28

the day before yesterday.

If this sum represents the 6000 8 lamps ordered on the 20th. of February and 16th. of March, the only thing which will remain to be sent are the different specimens of meters ordered for Antwerp.

Please confirm the contents of this letter.

About the 4 C for Berlin, we have no exact news yet to give, because our German friends are still waiting for your and the Light Co.'s ratification to begin business.

We remain

Yours truly.

SOCIÉTÉ ÉLECTRIQUE EDISON

Louis Rau

Administrateur délégué

[ENCLOSURE]

1883-03-21

Translation of a letter to the Compagnie Continentale Edison by the Comitato per le applicazioni dell'Elettricità Sistema Edison in Italia.

Milano 21 March 1883

Gentlemen:

We acknowledge the receipt of your favors of the 16 & 17 March and of your cable of to-day.

You send us some new invoices from Mr Edison, and you ask funds for about $9.600.

As we cabled you to-day we shall discuss this new demand of Mr Edison in the next meeting of our Committee, which will take place Friday, and we give you here-below the observations which we shall submit to our Committee on the demand in question.

1° Mr Edison has sent us 6 regulators for C. Dynamos, when you perfectly well know that we only have 4 such dynamos. This makes a difference of $1743.26 packing included.

2° Mr Edison has sent us 12 feeder-regulators and Prof. Colombo has only ordered 8 according to the letter sent to your Mr

[ENCLOSURE]

1883-03-21

Bailey in New-York, of which we have a copy; this makes a difference of $1.100. packing included.

We do not count the freight and custom expenses, which has caused us this exaggerated shipment not made in conformity with our orders.

3. In Mr Edison's invoice of 13 Nov.bre, there is a mistake on the contents of the case 6Y, which according to the note given to Mr Patterson by Messrs Bergmann & Co, and as we have found it ourselves contained 246 feet of N.o 2 conductors and not 143½ feet of N.o 2 and 102½ feet of N.o 1½ as it is marked in the invoice, this makes a difference of $92.35.

4. We have cabled and written you on the 6th January to order for us 65 meters of copper conductors of the diameter of the tube 2¾, to the contrary Mr Edison has sent us 65 meters tubes N.o 2¾ (his invoice of 12 February) with all the accessories, this makes a new useless expense of $414.98.

5. There remains the question of the Remington and Sims motors, amounting with the bases to $3.927.40; this is not the result we anticipated from the negotiations made by you and by Mr Bailey. Mr Edison has cabled us a few weeks

[ENCLOSURE]

1883-03-21

ago that he would leave this question to be settled by future arrangements. We cannot understand this prompt change in his opinion.

There is then a total amount of $4,248,45 on which we must call the attention of our Committee before we can open the new credit which is claimed.

We are etc. etc.
Comptoir etc. sistema Edison.
Signed L. Rava.

34 1883-04-02

SOCIÉTÉ INDUS^le & COMM^le EDISON

Société Anonyme. Capital : 1,500,000 Francs.

Ivry s/Seine, 5, Rue du Parc

Grand Diplôme d'honneur Paris 1881

1464 Bartholo

Joseph le Apl. 2nd 1883

Mr A Edison Esq 65 5th Avenue New York

My dear Edison,

I have received from Leibel 250 pcs Apl 1st for your account. Please debit my account therefore with $48,55

Truly Yours

Ch Batchelor

1883-04-02

Mr. Edison,

I went through the German contracts yesterday. They are very complicated and Mr. Bailey's letter is not very clear. But I think I understand them fully and will take them along to show them to you on the cars coming back on Wednesday, when we will have all day to talk and examine papers.

S. B. Eaton

April 2nd. 1883. per Mc.G.

1883-04-03

Milan
Italy
April 4th 83

Thomas A. Edison, Esq.

Dear Sir,

Last week I measured the resistances to Earth of the field magnets and armatures of two of the Dynamos. The resistance to ground or true varied from 700 to 75,000 ohms. One magnet of each machine reached the lower limit. This very low insulation is due to the dampness to which they were exposed in

the shipment and after their arrival here. Some of the cases were wet through and through from the exposure. They must have been exposed to the weather in changing steamers at Antwerp and in the shipment from Genoa. Although the Armatures were also exposed to the weather as shown by the wetness of the felt protection yet the Japanned paper absorbed no moisture as did the tape on magnets and they each measure over 50,000 ohms. All the wooden parts insulating rings on brush holders &c &c were too wet to be used and had to be replaced. The Dynamo room being below the level of the ground the walls are very damp. I found it necessary to put a layer of asphalt over the bricks and then place the cleats holding the conductors against it. From the nature of the mortar used it is impossible to drive any nails into the walls for holding the cleats but clamps are plastered into the walls to which the cleats are fastened. The Armington & Sims Engines with Base Plates have arrived and they are now being fitted up. In both the A & S and the Porter Engine Bed Plates there is a rib which

is not shown in the drawing and which makes it impossible to bolt the Engine Base Plate to a proper Plate without prying both to get under them. The int adds very little to strength and might with advantage be left out. The Safety Valves supplied with B & W Boilers not being sufficiently large and of a type not allowed by the Government Inspectors it was necessary to order new & larger ones from Glasgow which will delay the first lighting up until the latter part of May. The Feeder Regulators sent from New York are in situ and will probably be here in a short time. I have heard nothing from the Central Station as to what has been done in this respect there. The feeders have not galvanometer wires and the difference in drop on different feeders would have to be measured either at Feeder boxes or at points very near to them. I will start up without them having arranged circuits so as to be able to apply them whenever they may be necessary. Am afraid that when the Station is left in the hands of the Comitato it will be in the hands of rather poor men. There are plenty of young Engineers to look on but they are all afraid to take hold and handle

1883-04-03

Lax not a particle of practical ability in any direction. I feel sorry enough about Kirchhoff's Law paper but not one of them can set up a Wheatstone Bridge. Prof. Colombo has broached the subject to me of experimenting with Accumulators with a view of using them at the station.

The people here are very anxious to manufacture every thing themselves and they are now making cut-outs sockets, safety catches &c.

Dynamos are also being experimented upon.

Please advise me of any improvements in the running of the Station New York. Please send

Send one copy of the bulletins & Affiz

Yours respectfully

J. H. Liebke

C. G. Colombo

Via Manzoni 22 A

Milano

Italy

HÔTEL D'ANGLETERRE
CH. MATHIS

Batchelor 1883-04-08

Strasburg Va. 8 Apl 1883.

My dear Sir,

The machine No 32. which was placed in the Station here has worked every night from dark till daylight since Jan 5th 1882. or over 5200 hrs. Of the first 100 lamps there is one still burning & lamps burned for 5020 hrs. the record has been accurately kept by the R. R. direction and the average life of that first 100 has exceeded ~~500~~ 830 hours. They have always kept them at 16 candles by measure — They have never had a stoppage of any kind — The installation at the new station that we are making is 1200 lamps will be very complete

Yours

Batchelor

He said they were made of tar treated with sulphuric Acid I tried to get information but he knew no more — I broke one of the carbons and with the aid of a small glass the fracture looked glassy — I suppose he pours the tar on a plate and rolls it out to a certain thickness & then treats it with SO_3 then I suppose you can punch it out —

Now what I think is this: —

1 You will have a ~~fibre~~ carbon of infinitely denser structure from tar than from fibre

2 It will stand a much higher incandescence per unit surface

3 being of glassy fracture it will not occlude so much gas & will take a vacuum on pump

I have bought a few and will send you some. I will try them properly at [illegible] as well the carbons lo[illegible] as well & small as ours and [illegible] them tougher

11 1883-04-10

Paris Apl. 10 1883

My dear Edison, Bachelor

Whilst in Strasbourg the other day I found some lamps made in Germany by a man in the glass district — ~~seeing~~ they were an infringement on ours I bought some & took them to a friend of mine who has one of our machines & tested them I found they would stand any candle power and in the 1½ days I broke I noticed that in all the carbon was intact and not even blackened — I found my friend knew all about them & told me what the carbons were made of but neither he nor the maker knew anything about the economy of them

As far as I can understand this man has patented this nowhere as yet but in my private opinion he knows more about what is wanted in an incandescent lamp Carbon than any body else that is working on the subject on this side of the water

Yours "Batch"

In Germany they have just put on a duty of 600 marks per 100 Kilos on lamps which makes 8 cents each lin — very nice! will kill my little negotiation towards having all come from america at present

C. B.

1883-04-11

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ELECTRICITÉ

Grand Diplôme d'honneur PARIS 1881

Ivry-sur-Seine, le 11th April 1883.
5, RUE DU PARC.

Referred to Halzer Upton & Ryder for an answer. This is the regular Monthly ~~Hon~~

C. A. Edison Esq.
New York.

3

Complaint ~~you better~~ have a packer with at least a smattering of brains occasionally. What is actually essential to carbons existence

My dear Edison,

We have just received from the lamp factory a case marked CB 1 and I am sorry to say that through the very careless way in which it was packed half of the large carbon moulds have been broken; they were very stupidly put into the plating trough without a cover whereas the little ones were put in a box made for the purpose and consequently very few of the latter were broken. I think you must do something to prevent the lamp factory from packing our things in such a stupid manner.

We have also to complain that we got no notice of the shipment of this case and as we knew nothing of its contents we would have had any amount of trouble if the signer had not had a letter from Bradly giving a vague description of what was being sent. Why did not Upton give us a detailed list of this shipment? the information put on the cover of the box was of no good to us and I really expected after all the recommendations I made when there that this would have been attended to properly

1883-04-11

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ELECTRICITÉ
Grand Diplôme d'honneur
PARIS 1881

Ivry-sur-Seine. le 11th April 1883
5, RUE DU PARC.

(Cont.?)

Again this morning we receive a letter from our agent at Havre advising us of the arrival of 4 cases marked C B 1 + C B 219/21; it is most disgusting to receive such an advice without knowing anything of what goods are coming.

Why on earth dont ~~you~~ they send us, as we have so often asked ~~them~~ the marks numbers + detailed contents of each package sent together with their separate nett + gross weight! I am convinced that if the people over there knew the trouble we are having through the gross carelessness in which they make our shipments more attention would be paid to our reiterated demands for full information

Yours truly
Chas Batchelor

Encl.

Meadowcroft 3 Granit St. 1883-04-12

London. 12th April 1883.

Thomas A. Edison Esq.
65 Fifth Avenue,
New York.

Thanks for letter
Received

My dear Sir,

Enclosed herewith please find sample of Carbon made from Common tar in Thuringia, in Germany, and which is said to have a very long life in Lamps, which are made there in small quantities by the inventor. It is said to be very cheap.

While I was in Berlin Mr Schultz, who has invented an Accumulator engaged to send you a sample of it with the request that you would examine it and see whether you thought it good, & whether you can suggest any improvement on it. It has been under examination by Siemens & Halske during quite a long time, and they report the results much better than from any others that they have tried. Mr Schultz claims also that it is cheaper of manufacture and more durable. Poskas and I own the Patents for it, with the exception of Germany, and if you find it good we will propose a business arrangement with you for the States. We will send it addressed to you No. 65 Fifth Avenue. Will you please give instructions to care properly for any box arriving for you from Germany, and look after the opening of it, so that no accident happens.

We have much occasion for any material you may be

1883-04-12

be able to furnish regarding the action of Insurance Companies in the States in connection with lighting by the Edison or other systems. This will be utilized in several Countries from which we have received applications for information. An article was published in the "Scientific American", the date of which I cannot get, stating that 23 fires had taken place in the States through installations of Electric Lighting, 8 of which were very serious. Will you send us information and answer to such statements?

I have been busy here since finishing Berlin. I came here with the idea of doing some business with the Electric Contract & Maintenance Company, in which Forward is a Director. We have received a concession for the lighting of the Grand Opera and the Théâtre Français at Paris, and have also installations to make for a small Central Station at the Palais Royal and the Bon Marché. Our Paris friends propose to bring out a Company of 10 millions of francs for Paris, from which the Compagnie Continentale was to receive 500,000 francs in cash and 30% of profits of a Compy. to be formed for the City of Paris. - I objected to these conditions as insufficient, especially as Paris is the best City for Electric lighting in the world, and proposed to see if negotiations could not be made with the above named Company for the specific installations without any engagement of the entire city. - On arriving here I was satisfied after 3 or 4 days that no business of that sort could be done especially as the negotiation between the Contract Company and the English Edison Company had at the moment of my arrival entirely failed.

I have been much occupied for some time past with the reflection that no Capital can be found in France for Electric Lighting

Enterprises

enterprises outside of the Country, though all the Capital for which profitable employment can be found in France itself can be readily found at Paris. But in Countries like Austria, Russia, Italy, Spain, and even Germany, local Capital cannot be engaged to any great extent in carrying out such enterprises as seem now opening to us. Besides that in 2 or 3 of the Countries it will be very slow in flowing into such affairs, and this will give time for the formation of rival Combinations. I therefore thought, on finding that nothing could be done with the Contract Company, that it might be possible to form a General Continental Company, in relation with and operating in point of fact, the French Companies, while maintaining the organisations of the Compagnie Continentale, so as to do business in France under a French organisation.

The French Companies have done their work well up to this point, and have carried it where it seems possible to realize a Company with a Capital large enough to carry out at first hand all the enterprises offering in various parts of the Continent.

I commenced at once sounding round for such a Company. There are two difficulties in the way of realizing such an enterprise at this moment in the English market. First, the loss of so much money a year ago in all sorts of Arc Light, Lane-Fox, Maxim, and Swan Companies that were formed with total Capitals amounting to about eleven millions of pounds sterling, almost the whole of which is an entire loss, and this has sickened the general public concerning all affairs for Electric lighting. Second, the inefficiency of the management of the English Edison Company has indisposed a great many people who otherwise would be very well disposed. I have therefore passed some 3 weeks in constant talking to the persons whom I have worked with to show them that the results gained by the

English

1883-04-12

English Company were not to be taken as a measure of our Situation on the Continent, and I have done this with good effect, not having made a single failure in the Case of any Gentleman I have Commenced talking to. One of the features of the business now under way, if carried out, will be the purchase of the Swan Patents for the Continent. The Swan Company has a much more energetic organisation than yours in England, and is quite as influential financially. It would be absolutely impossible to organise a General Company, such as I have in view, in face of an opposition by the Swan people in the London market. They have some hard fighters and speculators who will very gladly risk £50,000 for a reasonable Chance of doubling it. I therefore commenced a negotiation with the Swan people through Mr Quilter, the organiser of the English Bell Telephone Co., and met directly after Mr Forbes, the Chairman of the English Swan Co. and also Mr Morrison and Mr Mulholland, the latter a very influential member of Parliament, and the former one of the largest Capitalists in London. I finally agreed with Quilter that if he throwed in with us with his financial friends, they should get £85,000 out of the pull. As the matter stands now a Company will be formed with a total Capital of £5,000,000, with a first issue of £1,500,000; the Capital of the 3 French Companies would be reformed, and the Companies themselves, with the exception of the Compagnie Continentale would be merged in the English Company. £100,000 would be paid in Cash, or in Cash and Preferred Shares, and somewhere from 33 to 50 % of the entire profits of the business of the Company would be given to the Compagnie Continentale as Consideration for the Patents etc. All the Contracts made up to the present time would be turned in to the English Company.

The

1883-04-12

The organization of the Compagnie Continentale will be kept up, with the persons most active in its administration continued in representation of the English Company, and 2 or 3 of its Directors would be Directors in the English Comp.y - The Presidents of the Italian, Belgian and Dutch Syndicates would also be members of the Board, and I should try also to bring in to it Dr. Werner, ~~Dr Charles~~ & Dr. C.W. Siemens.

I am going to Paris to morrow night, to talk over with our friends there the scheme in its present form. - They have already signified to me their acceptance of it in general terms.

The French Market has been very bad for the last 15 months, with no visible signs of improvement. By delaying the formation of a Co. for Paris, the chances for making up an English ~~Company~~ organization are much better, and for that reason I came direct to London from Berlin at much personal sacrifice, because I was certain that it would be difficult to resist the pressure in favor of the Paris Co. if I went there first. Quilter went to Paris this morning, so that as soon as I have fully explained the matter to our people we can take up the negotiation.

I have not advised you concerning this matter, because until yesterday I did not feel great confidence in the result, although everyone had been favorably impressed by my presentation of the affair. It was not until yesterday that an attempt was made to get down to any definite terms and scheme of organization, and I had fear that on arriving at that point the thing might go all to pieces. It seems however promising enough now to warrant my writing you so definitely about it.

I assure you that the opportunities for observation and reflection

reflection that I have had during my long absence from Paris, and freedom from the pressure of daily routine duties have satisfied me that the policy herein proposed will result most advantageously for our interests. The considerable Cash dividend that would be available and the large amount of Founders Shares in such an organization as that here proposed will give a large value to our Shares. If the Company is brought out it will be immediately after the last Stock Exchange settlement in the month of May, i.e. the very first days of June. Probably the issue will be guaranteed by Syndicate of Bankers made up in London, Paris, perhaps also Amsterdam, Berlin & Milan. A commission of 5% will be paid for this, and the amount coming to us will be increased by enough to cover the guarantee fund.

I beg that immediately on receipt of this you will cable me addressing 'Heraclite, Paris' or 'Bailey, London' (according as I shall be there or here) your impressions regarding it.

Should our Paris friends be favorable to the plan I shall come back here the last of next week and remain until the Company is brought out. I propose to work the press all over the Continent, in the first place showing the 'rationale' of the speculative movement a year ago, that it was an advantage taken by speculators of an ignorant interest and excitement created in the public mind by the Paris and the Crystal Palace Expositions; this to be followed by an exposition of the actual situation of the Incandescent system, the results so far obtained in the States and in Europe, and the enterprises which are now offering on the Continent, and which can be taken up immediately at fair prices and with good profits. Will you cause to be prepared immediately all the data that can be used for such publications from your own experience. Do not have any delay in this, because it will be necessary to act very promptly. - I shall cable you within

1883-04-12

within a day or two of the time that this letter will come to hand advising you whether our Paris friends accept the plan set forth, and whether I am in London to work it, so that you may go on with entire confidence, and I beg with very great expedition in preparing and sending forward the material desired.

Will you kindly communicate this letter to Major Eaton, as I shall not be able to send duplicate.

I am,
Very truly Yours,
F. R. Bailey

Has it come?
PRE

3 2 1883-04-16

SOCIÉTÉ INDUS^elle & COMM^le EDISON

Société Anonyme, Capital : 1.500.000 Francs.

à Ivry s/ Seine. 5, Rue du Parc.

CPR 16.83

Batchelor

Grand Diplôme d'honneur PARIS 1881

Ivry, le 16e April 1883

Mr Th. A. Edison

N° 65 5th Avenue

New York

Dear Sir:

As I am often away from our works travelling in different parts of Europe I shall be obliged by your sending all business communications direct to the Société Indus^lle & Comm^le Edison - so as to avoid all delays

Yours truly

Chas Batchelor

1883-04-16

Paris 16th 1883

My dear Edison I shall leave Liverpool on Saturday on the "Servia" to have two weeks in New York & rub up a little on Central Station matters & things generally

Yours

"Batch"

1883-04-18

SOCIÉTÉ ÉLECTRIQUE EDISON
SOCIÉTÉ ANONYME
Au Capital de 1 million de francs

EXPOSITION INTERNATIONALE D'ÉLECTRICITÉ
Paris 1881
GRAND DIPLOME D'HONNEUR

ADRESSE TÉLÉGRAPHIQUE
EDISON, PARIS

Paris, le 18 April 1883.

33, Avenue de l'Opéra

My dear Edison.

The bearer of the present is Mr Oskar von Miller, Engineer of the Government of Bavaria, who is charged with a mission concerning Electric Light.

I recommend him warmly to your best reception and I thank you in advance for what you will have the kindness to do to facilitate his studies.

I am, my dear Edison
Yours very faithfully
Ch. Batchelor

To this Gentleman we owe our brilliant success at the Exposition of Munich — He was here the Engineer in Charge and gave us a great deal of help.
CB.

WIEN – (VIENNA) AUSTRIA.

1883-04-24

COMMANDIT-GESELLSCHAFT FÜR ANGEWANDTE ELEKTRICITÄT

BRÜCKNER, ROSS & CONSORTEN.

Alleinige Concessionäre in Oesterreich für Edisons elektrisches Beleuchtungssystem.

Alleinige Concessionäre der Société des machines magnéto-électriques Gramme IN PARIS für die Erzeugung der Gramme'schen Apparate in Oesterreich-Ungarn.

ELEKTRISCHE BELEUCHTUNG.

Elektrische Transmission der Kraft.

GALVANOPLASTIK.

ELEKTROLYSE.

WIEN, 24 th. April 1883
III. Baumgasse 5.

Mr. Th. A. Edison
Menlo Park.
New York.

Dear Sir

We have the pleasure to inform you of a new success of your System of electric light. The new theatre of the city of Prag will be lighted by 1700 A. lamps, seven K dynamos. The theatre shall be opened on the 16/9 of this year.

We are dear Sir
Yours respectfully
Brückner Ross & Consorten

The number of dynamos now working in Austria (excepted Hungaria) is 5 K. 6 L. 1 B & 3 E dynam. ordered are 8 K and 1 L. dynamo.

Brief-Adresse: Commandit-Gesellschaft, Wien, III. Baumgasse Nr. 5. — Telegramm-Adresse: Brücknerross, Wien, Baumgasse 5.

1883-05-04

T. A. EDISON,

Cable Menlo Park, N. J., May 4 1880.

5 P.M.

Edison Menlo Park N. J.

Have obtained concession on condition of delivery samples before June first if samples impossible drawings may perhaps answer Cable when machines will leave on their arrival can make you definite offers

Cedermann

39 Genevre

Ans paid 20


May 4/83

[TRANSLATION FOLLOWS]

1883-05-15

Société d'Appareillage Electrique

Genève, le 15 Mai 1883

Monsieur Thos. A. Edison
New York
65 Fifth Avenue

Monsieur

Nous avons reçu en son temps votre lettre du 6 Mars & l'avons lue avec plaisir.

Nous vous avons informé que le traité passé entre nous, Biedermann, Jurlinden & Cherbuliez & la Société de l'Industrie du Gaz (traité que vous avez ratifié) était annulé.

Notre lettre du 17 Janvier vous avisait que nous avions alors constitué une Société par Actions, attendu que le contrat signé par vous le 9 Septembre 1880 avec MM B Z & C. rentrait en vigueur.

La nouvelle Société s'appelant "Société d'Appareillage Electrique", a été mise en lieu & place de MM. B Z & C. signataires du contrat passé avec vous.

Les Actionnaires réunis en Assemblée

[TRANSLATION FOLLOWS]

Constitutive, et Cour, ont adopté les Statuts de la Sté d'Appareillage Electrique, vous en trouverez ci-joint un exemplaire.

Le Conseil d'Administration est formé comme suit.

Président M. Arthur Achard, Ingénieur Directeur de la Sté des Eaux du Rhône, Député au Gd Conseil de Genève.

Secrétaire M. H. Chatelain, Employé.

Ingénieur Conseil M. Théodoro Cazzettini, Ingénieur de la Sté d'Instruments de Physique & Conseiller d'Administration de la Ville de Genève.

M. Gaspard Gilliéron qui vous est déjà connu.

M. Gustave d'Erstag, Banquier de la Maison d'Erstag & Cie de Genève.

Vous savez, nous rendre compte que ce conseil d'Administration réunit tous les éléments nécessaires à une bonne administration & promet haut & plein résultat à notre entreprise.

Vous verrez par les Statuts que vos intérêts sont sauvegardés d'une manière parfaitement claire par les Articles 6 & 44.

Ces Statuts ont été établis conformément aux lois en vigueur dans toute la Suisse.

Comme nous avons reçu votre demande d'Outillage pour le contrat passé entre la Sté de l'Industrie des Gaz & nous B.Z. & C., nous vous prions de bien vouloir nous adresser une simple lettre constatant que vous acceptez & ratifiez l'engagement fait par M.M. B.Z. & C. à la Société d'Appareillage Electrique dans ce contrat que vous avez traité avec les dits B.Z. & C.

De plus nous vous demandons de bien vouloir nous dire que vous acceptez & ratifiez l'article 7 des Statuts concernant les apports conditionnels & acceptés pour le prix de F 125000.

Enfin nous vous demandons par la présente de bien vouloir nous dire également que vous acceptez & ratifiez les Statuts de la Société d'Appareillage Electrique.

Nous avons eu au plaisir que vous avez bien voulu réduire de 10 cents par lampes une partie de la commande que nous vous avons faite, nous espérons beaucoup que vous ferez porter la réduction sur la commande toute entière c'est-à-dire sur la note du 4 Mai nous faisant 4530 lampes, d'autant plus que la commande de 10000 lampes faite à 5000 par lettre du 14 février, nous avons reçu 5070 lampes soit 3000 de plus que nos besoins pour un certain laps de temps.

Nous vous prions de prendre notre demande en sérieuse considération.

[TRANSLATION FOLLOWS]

Nous n'avons reçu que 420 lampes de 22 bougies, nous vous prions de nous en adresser encore 450 - (Quatre cent cinquante).

Veuillez aussi nous envoyer 1500 - (quinze cents) lampes de 10 (Dix) bougies, nous n'en avons encore point de cette catégorie.

Nous vous prions de nous les expédier dans des barils de 150 a 300 lampes de préférence aux grands tonneaux contenant 500 a 1100 lampes.

Nous espérons que vous nous expédierez des lampes ayant un charbon bien régulier & se tenant bien droit au milieu de l'ampoule de verre car nous avons reçu par les envois précédents un certain nombre de celles ci ayant des charbons défectueux

Votre lettre du 6 Mars nous annonçait la prochaine arrivée de Mr Goddard, vous pouvez être assuré que nous le recevons de notre mieux, car à l'heure ou nous écrivons, nous n'avons pas encore eu le plaisir de le voir.

Nous apprenant à l'instant que Mr Goddard est actuellement en Italie

Nous n'avons pas encore reçu les objets signalés comme devant nous être expédiés une semaine après votre lettre, soit le 13 Mars environ, nous espérons qu'ils sont en route & nous parviendront incessamment, quoique il y ait deux mois écoulés depuis cette date & que vos envois nous parviennent cinq semaines environ a partir du jour

[TRANSLATION FOLLOWS]

1883-05-15

Société d'Appareillage Electrique

Genève, le 15 Mai 1883

du jour de leur expédition,

Nous avons écrit à MM. Bergmann & Cie de votre ville, leur demandant de nous adresser le nouveau catalogue qu'ils viennent d'éditer.

Nous avons lu avec plaisir le journal que vous avez pris la peine de nous adresser & vous prions de nous adresser en double exemplaire les Numéros depuis le N° 16 au fur & à mesure de leur publication.

Dans le cas où vous auriez un dictionnaire conventionnel pour les correspondances télégraphiques nous vous prions de nous l'adresser.

Vous trouverez comme par le passé toucher le montant de notre commande chez MM. A. Iselin & Cie de Bâle.

Veuillez agréer, Monsieur, l'expression de nos sentiments distingués,

Le Secrétaire
A. Rambaldi

Le Président du Conseil d'Admin
A. Bétrix

H. Vorsetzer
Ingénieur Conseil

[TRANSLATION]

1883-05-15

Translation.

Geneva May 15/83.

Mr. T. A. Edison.

Dear Sir

Your letter of March 6th came duly to hand & contents have our attention.

We have notified you that the contract between us: Bidermann, Zurlinden & Oberhulzer and the Gas Co (contract which you had ratified) has been cancelled.

Our letter of Jan 17th advised you that we then organized a stock-company, as the contract signed by you on the 9th of Sept 1880 with Messrs B. Z. & Co was decided valid again.

The new company called "Société d'Appareillage Electrique" ("Electrical Co" or Company for Electric Apparatus) was substituted for Messrs B. Z. & C. the signers of the contract with you.

The stockholders assembled at the constitutional meeting of the 5th inst. adopted the statutes of the Electrical Co, whereof we herewith enclose you a copy.

The board of directors comprises the following:

President: Mr. Arthur Achard, engineer & director of the water-works of the Rhône, member also of the grand council of Geneva.

Secretary: Mr. R. M. Oberhulzer, one of the signers of the contract with you.

Consulting Engineers: Mr. Theodore Turrettini, engineer, Director of the Company for Physical Instruments and member of the administrative Council of the city of Geneva.

Mr. Caspar Zurlinden who is already known to you

[TRANSLATION]

1883-05-15

and Mr. John d'Everstag, member of the banking-house D'Everstag & Livet of Geneva.

You may be perfectly satisfied that the Board of Directors embraces all the elements requisite for a wise administration promising complete success of our enterprise.

You will percive in the Statutes, that your interests are fully protected by Articles 6. & 41.

These Statutes conform with the laws in force throughout Switzerland.

As we requested of you at the time when the contract was made between the Gas Co and us, B. Z & Co we now request that you will write us a simple letter stating that you accept and ratify the transfer by Messrs B. Z & Co upon the Electric Co of the contract entered into between yourself and the said B. Z & Co.

Moreover we request that you will kindly mention that you accept and ratify Article 7. of the Statutes concerning the transfers consented to and accepted for the price of Frcs 125,000.

And finally we request you herewith to also declare that you accept and ratify the statutes of the Electric Co.

We note with pleasure that you concluded to reduce the price of Lamps on a portion of our order and sincerely hope that you will apply this reduction to the entire order, that is to say to the invoice of March 1st on 4,520 lamps, the more so as the order for 10,000 lamps has been reduced to 5,000 by letter of Feb. 14th.

We have received 8,070 lamps, or 3000 more than we need for a certain lapse of time. We trust that you will take

[2]

1883-05-15

this fact into consideration.

We have only received 420. lamps of 32. c. p. and request you to send us 450. more.

Please send us also 1,500. lamps of 10. c. p. we have ~~received~~ none of them as yet.

Kindly ship them to us in barrils of 150. to 300 lamps each, which we much prefer to casks containing from 700 to 1,100 lamps

We trust you will ship us lamps containing very uniform carbons, standing very erect in the centre of the glass-bulb, because we have received in previous shipments quite a number containing defective carbons.

P.R. Upton

Your favor of March 6th advised us the impending arrival of Mr. Goddard. Rest assured that we shall do our best to receive him, but up to the present hour we have not yet had the pleasure to do so. We have just been informed that Mr. Goddard is at present in Italy.

The goods advised as going to be forwarded to us about a week after date of your letter, or about the 13th of March have not arrived as yet. We trust that they are under way and will shortly reach us, although two months have already gone by since that date. We also hope that your shipments may reach us in about 5 weeks from the day of their departure.

Russell Horwitz

We have written to Bergmann & Co of your city for the new catalogue which they have just published

We have read with pleasure the newspaper which you were good enough to mail us and beg you to mail us duplicates from No. 16 to the end, as they are

[3]

[TRANSLATION]

1883-05-15

published.

Should you happen to have a cipher code for telegraphic communication (cable use) we beg you will let us have it.

As in the past, you may continue to collect the amount of our orders from Messrs A. Iselin & Co of your city.

Please accept the assurance of our highest esteem.

(sig) A. Cherbulier
Secretary

(sig.) A. Achard
Pres. Board of Directors.

(sig) Th. Turrettini
Consulting Engineer.

[4]

1883-05-17

SOCIÉTÉ ÉLECTRIQUE EDISON
SOCIÉTÉ ANONYME
Au Capital de 1 million de francs

EXPOSITION INTERNATIONALE D'ÉLECTRICITÉ
Paris 1881
GRAND DIPLOME D'HONNEUR

ADRESSE TÉLÉGRAPHIQUE
EDISON, PARIS

Paris, le 17th May 1883.

33, Avenue de l'Opéra

RECEIVED
MAY 21 1883
ANSWERED
.....188...
FILE No.....

Thomas A. Edison Esq.
New-York.

Dear Sir,

Your favors of May 2nd & 4th came to hand and we shall be pleased to receive your further communications about the complaint of the Italian Co.

We note that you have credited our account with:

$74.63 That you have received from the Italian Brass & Copper Co. an account in their bills amounting to $74.63.

The affairs we spoke of to Mr. Batchelor as not having answered and attended to, do no refer especially to material and account, as we found out that the lamps which were reported as missing by our Hamburg Agent had duly been sent; the mistake came from the fact that the quantity of lamps marked on the outside of the casks was not right, more lamps

On some shipments of high volts we put in ten per cent extra lamps so as to sure that the full no. of good lamps were sent.

F.R. Upton

1883-05-17

being packed in, than marked.

We wished to point out especially regarding the ratification by the Edison Electric Light of Europe of the contract signed on the 10th July 1882 with the Italian Committee.

The Compagnie Continentale Edison wrote to Major Eaton on this subject on the 7th April, and we regret to say that up to this date no answer as yet been made.

We write again to-day to Major Eaton, and will be very much obliged if you will kindly see that this irregular situation is brought to a close.

We remain Dear Sir,
Yours very truly

SOCIÉTÉ ÉLECTRIQUE EDISON
Administrateur Délégué

L B Eaton

The last paragraph of this letter refers to matters in your hands

Please return after reading Insull

[TRANSLATION FOLLOWS]

1883-05-22

Copie

Société d'Appareillage Electrique

Genève, le 22 Mai 1883

Memorandum pour Monsieur Goddard

Nous prions Monsieur Goddard de bein vouloir nous procurer les pièces & renseignements suivants

Demandez à Mr Edison les dessins anciens & ceux parus jusqu'à present des machines electro dynamiques de tout les models, des sockets de tout les genres, switches, shade & holders, wood materials cut out plugs & caps, coupling boxes, Pendants, Rigid Brackets, Swing Brackets, Electroliers & en général tout les dessins necessaires à l'exploitation de l'éclairage electrique

Nous addresser au fur & à mesure de leur publications les dessins & ecrits émanant de chez de Mr Edison.

Prier Mr Edison d'aviser M.M. Bergmann & Co. que nous sommes la Ste Edison pour la Suisse & de nous faire la même remise qui a la Ste Edison de Newyork

Demander à Mr Edison la liste des pays exploitant les Brevets Edison & par quelles sociétés.

Demander si la Société d'Appareillage Electrique peut faire des installations vendre des lampes dans les pays où il n'existe pas

[TRANSLATION FOLLOWS]

1883-05-22 2

de Mr. Edison ou de concessions speciales.

Demander à Mr Edison Copie de ses dernier Brevets, l'envoi regulier de son journal

Demander à Mr Edison de concéder la Ste d'Appareillage Electrique le monopole de son système dans les pays on il n'a pas de Ste exploitant ses brevets.

Réponses aux questions de Mr Goddard

La Ste est constituée depuis le 5 Mai avant sa constitution il a été fait

1 Installation de 100 lampes de 8 bougies chez Mr Roussy fils a Gillamont près Vevey

1 id de 30 lampes de 16 bougies la Baronne di Rothchild a Pregny

1 id de 3 machines de 60 lampes de 16 bougies a l'Hospital de Lausanne

1 Petite Station Centrale une machine de 200 lamps de 16 bougies aussi a Lausanne

le benefice sur ces installations à servi a diminuer les depenses de l'ancienne Société

La Société actuelle a fait 2 Installations 1 dans ses bureaux Boulevard du Théâtre 8. l'autre dans un théâtre Concert a Genève

La Société d'Appareillage se propose de Creer en Suisse des Stations Centrales dirigées par des Société locales dépendantes

[TRANSLATION FOLLOWS]

1883-05-223

de la Société d'Appl partout où les Compagnies du Gaz n'ont pas de monopole exclusif dans les villes où ces Compies ont seules le monopole de l'éclairage la Sté d'Appareillage cherchera à traiter avec elle.

Outre ces installations centrales la Sté établira des installations isolées aux industriels ayant de la force motrice

Nous prions Mr Goddard de demander à Mr Edison de nous addresser une pièce qui nous permettra de prendre en Suisse et de les exploiter tous les brevets de Mr Edison dès que la Suisse aura fait une loi sur les Brevets

[TRANSLATION]

1883-05-22

Translation

Electric Co. of Geneva.

Geneva May 22d 1883.

Memorandum for Mr Goddard

We request Mr Goddard to kindly obtain for us the following documents and information:

Ask Mr. Edison for the old designs and those which have appeared up to date of electro-dynamic machines of every model, of sockets of every kind, of switches, shades and shade holders, wood materials, cut-out plugs, and caps, coupling boxes, pendants, rigid brackets, swinging brackets, electroliers and generally all designs bearing upon electric illumination.

To mail us for the purpose of publication the sketches and tracings emanating from Mr. Edison.

Ask Mr. Edison to notify Messrs Bergmann & Co. that we are the Edison Co. for Switzerland and that they should give us the same terms as to the Edison Co of New York.

Ask Mr Edison for a list of the countries where Edison patents are worked and by what companies.

Inquire if the Electrical Co (of Geneva) may make installations, sell lamps etc in countries where there are no Edison Companies or special concessions.

Request Mr. Edison to grant the Electric Co (of Geneva) the sole right of introducing his system into such countries where there are no companies to exploit his patents.

[TRANSLATION]

1883-05-2

Replies to Questions asked by Mr. Goddard.

The company is organized since May 5th. Previous to its organization there was made:

1. Installation of 100 lamps of 8.c.p. at M. Roussy jr. at Gillamont near Vevey.

1. do. of 30 lamps of 16.c.p. at the villa of the Baroness de Rothschild at Pregny.

1 do. of 3 dynamos of 60 lamps of 16.c.p. at the Hospital of Lausanne

1 small Central Station with dynamo of 200 lamps of 16.c.p. also at Lausanne

The profits on these installations have reduced the expenses of the old company.

The present (new) company has installed 2 plants; one in its offices Boulevard du Théatre No. 8 and the other in a concert-hall of Geneva.

The Electric Co intends to establish Central Stations in Switzerland, under the management of local companies dependent upon the Electric Co. wherever Gas Companies have no exclusive rights or these companies. In places where these companies have the exclusive right the Electric Co will try to arrange with them.

In addition to these Central Stations the company will install isolated plants in factories possessing motive power.

We beg of Mr. Goddard to request Mr Edison to mail us a document securing for us the sole right for Switzerland for the exploitation of Edison's patents as soon as Switzerland shall have a Patent Law

1883-05-24

Zurich, May 24th 1883

My dear Edison, OVER

I fear you began to think I had forgotten my promise to look after your interests in Geneva, but I have been detained in Italy much longer than I expected, by the serious illness of a friend of my wife's whom she could not well leave. But having located my family in Carlsbad I started at once for Geneva where I have been for nearly a week, having left there yesterday on my way back to Carlsbad, stopping here en route to visit the Civics Industrial Exposition where the General people have a dynamo at work driving a sewing machine. The dynamo in the Exposition building acting as a motor operated by power transferred

[ON BACK OF PRECEDING PAGE]

Please attend to the Bullalin matter

write Turnbull that we could send him

drawings but within the last two

months have made great improvement

in the Dynamo so that the 60

light machine now gives 200 the

150 light gives 275 and the 250 ark

gives 400 lights we have a 100

Light machine which we sell to the

Light Co for $400.

We think that no more improvements can

be made & the types of machines are

final. that we advise he order

1 machine of each kind —

25 Light " price	200	Free on Board
50 "	300	
100 "	400	
200 "	750	
275 "	950	wholesal drawings
400 "	1500	

from another dynamo operated by a turbine wheel in the river, some little distance from the building. They are doing no lighting as the buildings close before dark.

I found that the General Company has not been definitely formed until the early part of this month and that as yet they had done but little business, owing to the fact that as yet they have received no drawings or specifications of any kind from you and further because their operations have been interfered with, first by the Paris people ~~by~~ through parties in Berne and afterwards by a firm in Vienna "Brückner & Ross, representing themselves as the agents of the Edison System and offering to sell Edison Lamps at five francs each, while the Berne Co have been asking 7½ frs. The General Co. had an arrangement almost perfected to install a large

1883-05-24

Isolated Plant in a Chocolate Factory at Neuchatel a very large establishment requiring I think 6 or 700 lamps, when the parties received an offer from Vienna at 5 fcs ea for the lamps which the Geneva Co had asked 7½ fcs for. The result is that the order is suspended for the present. You will learn from the copy of a letter which I enclose what has been done by the Swiss Co to the present time & what they propose to do, but they are greatly embarrassed for want of the drawings of the different machines. All those now in use have been built by Mr Turrettini from the knowledge he derived during his visit to Menlo Park, and altho' they seem quite effective I doubt if they are equal to the latest machines built at Lyverch St. I send you a copy of a letter setting forth the things the Geneva people ask for. I send it in the original french for fear my translation might not

be sufficiently exact - I trust you will make no delay about sending all the drawings they can possibly need for I think there is going to be a good deal of work in Switzerland and the Geneva Co. ought to be in position to do it - Mr Turrettini confidently expects the passage of a patent act at this session of the Congress and has taken the necessary measures to protect the Edison interests in case of such action - Please have a full set or rather several sets of the bulletin sent to Turrettini immediately and have future numbers sent as published, several copies of each address - "Société d'Appareillage Electrique, Geneva, Suisse" Also please have Bergmann send several copies of Catalogue with discounts which I have told the Geneva people would be the

1883-05-24

same as those granted to the Edison Co in New York. They have been getting their supplies of such things through the London Co. at an advanced price & would like to order direct.

I trust you will not neglect to forward the required drawings without unnecessary delay, for they certainly have cause of complaint as Turrettini says you wrote all things asked for would be forwarded by me, & I had nothing at all to give them. Some of the best men in Geneva are interested in this matter and will, I think, push the business when they are placed in position to do so.

I have been unable to meet Bailey as yet, I waited several days in London expecting to meet him there and then in Paris when he wrote me he was detained in Berlin, so I had to go on to Italy without seeing him. Batchelor (Bailey) too was absent. He wrote me he

1883-05-26

would be in Milan in March (25th)
and would go from there to Rome
or Florence & if I would let him
know when I would be at that
time we would arrange to meet.
I wrote him at Milan that I
would be in Rome on the date
named and would meet him
there or at Milan or Florence as
might best suit him. Receiving
no reply I wrote him at Paris
& about ten days ago rec'd a reply
that he had been detained in
Berlin and was then going to
London in connection with the
formation of a new Company
to exploit the system in Europe
& would be detained there till about
June 1st after which he hoped he
should see me in Paris. I learn
through Riedermann whom of course
I met in Geneva that Bailey's
negotiations for Germany have
not been successful - he says he
has been trying to make a com-
-bination with Siemens, but has

1883-05-24

not succeeded - what his new Company in London is I do not know -

A proposition has however been made to Biedermann by two of the largest Vienna Banks to form a grand Company for the whole of Europe, furnishing all the funds required and making a market for the stock - asking him to visit Vienna about June 1st to concert measures and offering to pay his expenses and those of any other persons he may think it advisable to bring with him - Turrettini has agreed to go and I have promised to join them there - They understand that the European Co organized in Paris must be dealt with and in the letters which Biedermann showed me, they profess themselves ready to acquire all these interests - Of course I cannot tell what may come of it, but if they are ready to furnish enough money it may result beneficially to all - I think the less said about this the better until I have been to Vienna &

1883-05-248

have found out what can be done. of course you will tell Mr Eaton & I will keep him or you advised of anything that comes of it. If it really amounts to anything I shall probably be able to consult with Mr Wright who will be in Europe next month. & in the meantime can talk it over with Mr Drexel who is now in Carlsbad.

I will advise you promptly of everything of interest in this matter Don't fail to forward promptly all that the Geneva people ask and instruct the Paris people not to permit their agents to interfere with their territory.

My address is always Care Drexel Harjes & Co Paris -

With kind regards to all at 65 I am,

Very truly yours

C. Jouvard

Thos A Edison Esq
65 Fifth Ave
N.Y.

NORDDEUTSCHER LLOYD.

1883-05-28.

May 28th 1883

DAMPFSCHIFF Dover – Near Southampton

My dear Insull.

We are getting near port and I would ask you to remember, about "Wallerstein" – Edison told me on the boat that he would attend to it & if you will call his attention to it so that it will go through it I am sure will be acceptable to some of our people here –

– Also see that Crocker gets the information necessary for giving me prices on Magnet wire for the new sizes of dynamo cores –

– Also mail me immediately my note book that I left on your desk or if it is too large tear out those leaves that have any writing on & number them & send by mail

– The copies of Hornig's estimates of course I did not get and if you could hurry them up for me I should feel obliged –

– Tell Vail I am much obliged to him for valuable statistic information he gave me just before I came away

– I also had not time to thank Clarke for his kind news; perhaps you will do this for me –

Very truly Yours

Batchelor

It is blowing like the devil and the writing looks a little drunken' eh.

1883-05-30

Form No. 8.

CABLE MESSAGE.

THE WESTERN UNION TELEGRAPH COMPANY.

All CABLE MESSAGES received for transmission must be written on the Message Blanks provided by this Company for that purpose, under and subject to the conditions printed thereon, and on the back hereof, which conditions have been agreed to by the sender of the following message.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
40	M	CM	18 Milano 878

Received at FILED AT 854 BROADWAY May 30 1883.

To Edison Co ny
65 Fifth Ave

Ship five hundred meters number two tubes three hundred number four without Connections Compound
Edison

Form No. 8.

CABLE MESSAGE.

THE WESTERN UNION TELEGRAPH COMPANY.

All CABLE MESSAGES received for transmission must be written on the Message Blanks provided by this Company for that purpose, under and subject to the conditions printed thereon, and on the back hereof, which conditions have been agreed to by the sender of the following message.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
11	NOK	M	4 Berlin

Received at _____ June 6 1888.

To Edison Ny

65 Fifth ave

Yes O

Edison.

1883-06-06

SOCIÉTÉ ÉLECTRIQUE EDISON
SOCIÉTÉ ANONYME
Au Capital de 1 million de francs

EXPOSITION INTERNATIONALE D'ÉLECTRICITÉ
Paris 1881
GRAND DIPLOME D'HONNEUR

ADRESSE TÉLÉGRAPHIQUE
EDISON, PARIS

Paris, le June 6th 1883

33, Avenue de l'Opéra

Thomas A. Edison Esq.
New York.

Dear Sir,

We duly received your favor of May 5th answering to the claims of the Italian Committee to which we have given communication of your letter.

We now beg to send you a translation of their letters of 2nd June, which we recommend to your best attention, and also of 18th May.

We have also received your favor of May 25th and duly note you have credited our account with $581.43 for the 3 Automatic Regulators sent by mistake to Genoa.

We are happy to inform you that we have been able to dispose of one Z automatic regulator and one K automatic regulator, for which please send us a new invoice.

We shall endeavour to dispose of the 3rd automatic regulator in the shortest possible delay.

Yours truly,

SOCIÉTÉ ÉLECTRIQUE EDISON

Administrateur délégué

[ENCLOSURE]

1883-06-06

Extracts of a letter addressed to the Compagnie Continentale Edison of Paris, by the Comitato per le Applicazioni dell'Electricita sistema Edison in Italia dated. Milano 18th May. 1883

We shall take the liberty to point out that in the former invoice, Mr Edison charged the tube No 4 at $1,60 per feet, and in the last he charges it at $1,70.

Please let us know the reason of this difference.

We also find the cost of the 100 candles lamps very heavy.

If the 8 & 16 candles lamps cost $1,50 and the 32 candles lamps $1,60 we find quite out of proportion that the 100 candles lamps should cost $2,50.

Please transmit our remark to Mr Edison.

Comitato per le applicazioni etc.
Signed. E. Rava.

[ENCLOSURE]

1883-06-06

Extracts of a letter addressed to the Compagnie Continentale Edison of Paris by the Comitato per le Applicazioni dell'Elettricità, Sistema Edison in Italia, dated 2 June 1883.
Milano.

As for the answer you ask to the letter of Mr Edison we have very little to add to what we have already written on the matter; still we shall recapitulate the reasons already exposed, adding a few answers to the arguments of Mr Edison.

1° Mr Edison says that regulators of reserve are necessary, and that therefore he has sent 6 regulators for the dynamos. You will please observe that on the 4 dynamos there will always be one of reserve, which will also give always a regulator of reserve.

2. Concerning the feeder-regulators Mr Edison is mistaken thinking it had been decided to light up "La Scala" with a separate installation; to the contrary it has been decided to light it up from the Central Station and through the general canalization.

Besides we do not see which relation there is between this and the number of feeder regulators. The

[ENCLOSURE]

1883-06-06

have only 6 feeders, and 6 regulators will be amply sufficient especially as we shall only use them later on.

For the present we intend to run the station, as the Pearl Street Station was run at the time Prof Columb was in New York. The feeder regulators were not even in use when Mr Lict has left the N.Y. Central Station in the month of November, so that for the moment it would be almost impossible for us to use them.

It is true that Prof. Columb has given to Mr Edison a certain latitude for the appreciation of the material required by our Station, and therefore we have accepted a part of the feeder-regulators, which had never been ordered, but this latitude was meant in certain limits, owing to the means of which our Committee can dispose at present.

5° As for the Armington & Sims motors, it is clear from what Mr Edison himself has written, that it would have been impossible for us to run our Station with the Porter Allen. It was then his duty to enable us to run it by substituting two motors, or else we should have had to protect the four dynamos altogether, Mr Edison being responsible of their

[ENCLOSURE]

1883-06-06

good working not only as separate engines, but also collectively. This would have been impossible without the new motors and Mr. Edison should have had to furnish them.

Nevertheless, as we have said already several times, we do not intend absolutely to raise a discussion on this point; the Porter Allen are here at your disposition and we shall do our best to use them in isolated plants or else in small central stations, or even in our Milan Central Station, when we shall increase the number of our dynamos, under reserve of course that the Porter-Allen can be governed by an Armington & Sims, as Mr. Edison formally affirms.

This is what we can answer to Mr. Edison's arguments, and we think you cannot discuss the justice of our claims.

Yours truly
Comittah per le applicazioni
etc. etc.
Signed. E. Mava.

Form No. 3

CABLE MESSAGE.

THE WESTERN UNION TELEGRAPH COMPANY.

All CABLE MESSAGES received for transmission must be written on the Message Blanks provided by this Company for that purpose, under and subject to the conditions printed thereon, and on the back hereof, which conditions have been agreed to by the sender of the following message.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
49	Co	Dy	20 Paris 9.30

Received at 191 BROADWAY

Dated June 8 1889

To Eknoside Ny

Thos A Edison 65-5ave

Co.

Ship immediate model hamburg or Contract busted K. S. Lab will do tell bergmann not send Galvanometers

To guard against mistakes on the lines of this Company, the sender of every message should order it repeated; that is, telegraphed back from the terminus of said lines to the Originating Office. For such repeating, the sender will be charged in addition, one half the usual tolls of this Company, on that portion of its lines over which such message passes.

This Company will not assume any responsibility in respect to any Message beyond the terminus of its own lines; and it is agreed between the sender of the following Message and this Company, that said Company shall not be liable for mistakes or delays in transmission or delivery, or for non-delivery to the next connecting Telegraph Company, of any unrepeated message, beyond the amount of that portion of the charge which may or shall accrue to this Company out of the amount received from the sender for this, and the other companies, by whose lines such message may pass to reach its destination; and that this Company shall not be liable for mistakes in the transmission or delivery, or for non-delivery to the next connecting Telegraph Company, of any repeated message, beyond fifty times the extra sum received by this Company from the sender for repeating such message over its own lines; and that this Company shall not be liable in any case for delays arising from interruptions in the workings of its lines, nor for errors in cipher or obscure messages. And this Company is hereby made the agent of the sender, without liability, to forward any message over the lines of any other company to reach its destination.

This Company is not to be liable for damages in any case, where the claim is not presented in writing, within thirty days after the sending of the message.

Sinai Pa. 1863

Chas Bartholomew

Received

Order

4

1883-06-12

SOCIÉTÉ INDUS^elle & COMM^le EDISON

Société Anonyme. Capital : 1.500.000 Francs.

à Ivry s/ Seine, 5, Rue du Parc.

Grand Diplôme d'honneur PARIS 1881

Ivry, le 12th June 1883

My dear Edison

As promised some time past I sent you a few days ago 3 copies of the "Electrotechniker Verein" which, I trust will reach you safely.

Yours faithfully

Chas Batchelor

OK Reed Shown

1883-06-12

SOCIÉTÉ INDUS^elle & COMM^le EDISON

Société Anonyme. Capital : 1.500.000 Francs.

à Ivry s/ Seine, 5, Rue du Parc.

Grand Diplôme d'honneur PARIS 1881

Ivry, le June 12th 1883

My dear Edison

In testing lamps at 64 c.p. do you make them give 64 candles all the time by keeping them in Photometer & regulating — the way I do is as follows — Test lamp in Photometer for 64 candles & see how many volts & then keep this volts on it until it goes out regardless of candle power — Adieu I right

Yours Batchelor

We do the same but get Economy at same time & also sometimes put lamps back after burning some time to get full in Candle power

Letter sent to Reed for inclusion in Notebook

Does he refer to curves you sent?

taken into consideration with 50% of breakage in travail make them much dearer than the nickel ones — One more thing — I brought with me some fibres for all lamps cut. In quaging these carefully I find 2 thousandths more in width on the 50 & 100 c p fibres and 1 thousandth more on the small fibres

For instance 100 c p. marked 10 × 70 is 10 × 72

also 6½ × 8 × 13½ is 6½ × 8 × 14½

and so on

Ask Edison if this is all O.K. and made so by design or by accident, it materially alters the life & economy — My fibres are all kept down to size — These fibres I quaged myself & found them uniformly so

Yours Batchelor

1883-06-14

SOCIÉTÉ ÉLECTRIQUE EDISON
SOCIÉTÉ ANONYME
Au Capital de 1 million de francs

EXPOSITION INTERNATIONALE D'ÉLECTRICITÉ
Paris 1881
GRAND DIPLOME D'HONNEUR

ADRESSE TÉLÉGRAPHIQUE
EDISON-PARIS

Paris, le June 1883. 188

Refer to Upton
Look for explanation of his
suggestions about
carbon moulds

Mr. Lucius Carbon

Received with thanks Horings estimates. Your letter of June 1st on Italian patents to hand & it will be attended to immediately. Please call Upton's attention to the letter I sent you a few days ago relative to our breakage on the case CB 1 — Now another thing, all the carbon moulds are bent frightfully, and take a great deal more time to set up in the furnace than the others — they break very easily — and these things

osure.

Philip Seubel
Ingénieur Electricien
de la Société Electrique Edison
33 Avenue de l'Opéra
PARIS.

1883-06-20

Munich 20 June 1883.

Thos. A. Edison Esq.
New York

Dear Sir

Enclosed I have the honor to hand you copy of report of Prof. Dr. Settenkofer, the great authority on hygiene, concerning atmospheric changes in theatres during a performance by gas light and by electric light. The observations were made at the "Residenz-Theater" which I began lighting recently, achieving a great success. I am just now getting a full set of working plans ready for the stage regulator and other apparatus that I am using and shall send them to you.

I should regard it as a very great favor if you would let me have one of your late photographs of larger size such as I have seen with Batchelor and Hammer with your autograph affixed.

I am just now beginning to build

a central station of which the Residenz-theatre and the much larger "Hoftheater" with about 1500 lights will form part. It would therefore be very opportune to send me all such material and informations as you may deem necessary. Especially the meter I should like to get some practical information about. What is the largest size meter that has as yet been used.

We just closed contract with the administration of the Hoftheater at Stuttgart (the capital of Würtemberg) for a plant of 900 lights so that we may say that by the end of this year we will have 5 large theatres lighted in Germany by your system.

I remain

Yours truly

J. P. Seubel

Georgenstr. 4.

Munich

We can furnish meters up to 2 or 300 lights while there is more you can put two 3 in - Each in a Branch = Batch has all the information I think about meters + Everything =

[ENCLOSURE]

[TRANSLATION FOLLOWS]

1883-06-13

München d. 13t. Juni 1883.

Hygienisches Institut
der
Königl. Ludwigs-Maximilian-Universität
München.

Betreff:
Beleuchtung des Königl. Residenz-Theaters in München mit Gas u. mit electrischem Licht.

An Herrn Ingenieur Philipp Seubert
vonder Société Electrique Edison
z.Zt. in München. Georgenstr. 4.

Bei einer mit Ihnen und den Herren Professor Dr. Ernst Voit, Mitchef des Königl. Residenz-Theaters und dem Hygienischen Institut vorgenommenen vorläufigen Untersuchung zu Feststellung und Abschätzung der Leistung, welche die Temperatur-Erhöhung durch das Gas-Glühlicht der Lampen des Königl. Hof-Theaters in Folge Ihrer Anregung erzielt, haben Sie Ihnen mir mitgetheilt, daß Sie mir auf Ihre Kosten die Apparate zur Temperaturbestimmung zu leihen.

[ENCLOSURE]

[TRANSLATION FOLLOWS]

1883-06-13

Beobachtungsorten Jassy liegen. Die Resultate
Barometerbeobachtungen haben wahrscheinlich bei
beiden Jassy ein Resultat ergeben, dessen
Wiederholung auf eine größere Genauigkeit von
Wichtigkeit sein und an unseren Instrumenten der
Fehler erspart.

Bei dem Jassy waren wir einige Tage
10 bis 12 Personen auf der Station versammelt
Jassyaufzeichnungen zugegen, der Versuch wird
gern und wurde fortgesetzt die Beiden, als auch
der Jassyaufzeichnungen über ein Stück
Zeit die volle Beobachtung erhalten. Die
Temperatur wurde an den Thermometern bei
Beiden von 6 zu 6 Minuten beobachtet.

Die beiden Jassy waren auf Chaus-
see der Gartenstadt zwischen zwei
200 und 600 Personen ein Jassyaufzeichnungen
umgeben und wurden die Thermometer
von 10 zu 10 Minuten beobachtet.

Die Temperatur stieg sowohl bei dem
als auch bei beiden Jassy von Minute
zu Minute von Anfange, mit ganz einen
kleinen Gegenschwankungen bis zum
Maximum von 6 und fielen zu
die Zeiten und die differenzen zwischen
Maximum und Minimum in einer
besonderen Tabelle angegeben.

[ENCLOSURE]

[TRANSLATION FOLLOWS]

1883-06-13

Temperatur der Luft mit Gasbeleuchtung und electrischer Beleuchtung im Königl. Residenztheater.

	Gasbeleuchtung.						Electrische Beleuchtung.					
	I. Versuch 2. Mai 1883 leeres Haus. Temperatur im Freien 11,8° Celsius.			II. Versuch. 6. Mai 1883 volles Haus. Temperatur im Freien 11,5° Celsius			III. Versuch 29. Mai 1883 leeres Haus. Temperatur im Freien 17,6° Celsius			IV. Versuch. 10. Juni 1883 volles Haus. Temperatur im Freien 15° Celsius.		
	Parkett	I. Rang	III. Rang	Parkett	I. Rang	III. Rang	Parkett	I. Rang	III. Rang	Parkett	I. Rang	III. Rang
Minim.	15,2	16,2	16,2	16,0	16,8	21,6	16,6	17,2	17,6	17,6	18,0	18,5
Max.	16,5	19,4	25,4	22,2	23,6	29,0	16,9	18,0	18,5	19,6	21,2	23,0
Differ.	1,3	3,2	9,2	6,2	6,6	7,4	0,3	0,8	0,9	2,0	3,2	4,2

Es geht daraus zur Evidenz hervor, wie von Seite des Publikums durch die Luft durch die electrische gegenüber der Gasbeleuchtung erfüllt wird. Vollständig ist der Unterschied bei leerem Hause am größten. Es lassen sich hieraus keinesfalls aber die von den Gasfabrikanten und Mitgliedern aufgestellten Behauptungen einfach widerlegen.

Der Gasfabrikant ist von Beginn der Vorstellung voll beschäftigt, die Gasuhr nicht, während der Akte wird die Beleuchtung der Gasflammen sehr reduzirt und die auf der Bühne nach Bedürfniß angezündet, ein Gasfabrikant meint sich der Vorstellung wieder in Gegenwart über [illegible] lassen sich diese Veränderungen quantitativ nicht gut verfolgen.

Zum genauen Vergleich eignen sich daher [illegible] nur die Kerzen.

Carta.

[ENCLOSURE]

[TRANSLATION FOLLOWS]

1883-06-13

Auto bei einem Zuge, mit angezogener Wasserstoffbremse und der Stärke der Belastung der Bremsen und des Zugwagens nicht gemessen wurde und der Wagen immer aufgegangen blieb.

Aus diesen Versuchen geht hervor, daß bei langen Zügen die Dehnung in der Temperaturspirale im obersten Range bei Gasbeleuchtung 10 Mal (= 9,2 : 0,9) größer ist, als bei elektrischer Beleuchtung. In den unteren Räumen des Zuges waren die Differenzen selbstverständlich kleiner.

Auf bei besagten Zuge beträgt die Dehnung auf 6° Grad Celsius, indem auf der Gallerie bei Gasbeleuchtung 29° Grad (= 23,2° Réaumur) und bei elektrischer Beleuchtung 23° Celsius (= 18,4° Réaumur) beobachtet wurden. Bei elektrischer Beleuchtung waren die Temperaturen im III Range (23° Celsius) nicht einmal so hoch wie bei Gasbeleuchtung im I Range (23,6° C.).

Es muß noch ausdrücklich bemerkt werden, daß bei den Versuchen mit Gasbeleuchtung, die Temperaturen im Freien niedriger waren, als bei den Versuchen mit elektrischer Beleuchtung, so daß also, letztere jedenfalls nicht zu Ungunsten ausfiel.

Die Ventilationsräume der Luft entlangen kann ich nur bemerken, daß bei langen

Zuge

[ENCLOSURE]

[TRANSLATION FOLLOWS]

1883-06-13

(6)

Folgende ergebnisse über von dem Gas-
generator produzirten Kohlenoxydmengen
verdanken wir Herrn Professor Fischer in Göttingen
die folgenden Zahlen bezeichnen mögen
es sich die Temperatur für Erzeugung der
Wassergas und von Cyclopentagas der
Luft mit folgendem Ergebnis 0,4 pro mille
bei Fortleitung eines Gases durch
mit 1 Kerze 0,5 pro mille
mit 1 Kerze 1,1 " "
mit III Kerze 1,4 " "
Nach einer weiteren Gasuhr
mit 1 Kerze 0,6 " "
mit 1 Kerze 1,0 " "
mit III Kerze 1,6 " "
bei elektrischer Beleuchtung
Lampe 0,4 " "
Nach einer Minute
mit 1 Kerze 0,5 " "
mit 1 Kerze 0,5 " "
mit III Kerze 0,6 " "

Es ist elektrische Beleuchtung mit
Lampen zur Seite Kohlenstoffe einfach,
so entsteht geringe Kohlenoxydmengen
entwickelung, bei elektrischer Beleuchtung
der Gegenwart von einigen Arbeitern
wird der Sauerstoff unter besonderen
von Atmosphäre zu verbrennen
Bei Anfertigen gleicher Zeit einen
abnorm niedrigen Differenzen Kohlenoxyd

Schaeffer

[ENCLOSURE]

[TRANSLATION FOLLOWS]

1883-06-13

[illegible]

[ENCLOSURE]

[TRANSLATION FOLLOWS]

1883-06-13

Sie, wenn eine Morgen angewandte System, schon nicht in dem Maße wie bei der Gewächshaus-Heizung ausreicht, die bei der jetzigen Beleuchtung unentbehrliche Ventilation einer auf Abhilfe sein, so gilt dies bei besonderen Umständen der Wasserfall der Temperatur und gute Gas- und elektrische Beleuchtung oder so gar gefährdet werden, wie bei Benutzung

Also den vorliegenden Wasserfügungen lassen sich mit Bestimmtheit 2 Sätze folgen:

1. Es ist die elektrische Beleuchtung in Gegenwart die Wasserfüllung der Luft in Gasen verpestet.

2. Daß sie allein an und für sich nicht im Stande ist, die Ventilation der Gasen entbehrlich zu machen, daß sie aber mit geringerer Ventilation auskommt, als die Gasbeleuchtung, weil es für die Ventilation nicht mehr darauf ankommt, die Luftverderbniß durch Menschen, sondern auch gegen die Gefahr der Verbrennungsprodukte der Flammen gerichtet werden muß, während sie bei der electrischen Beleuchtung nur mit dem Athmen der Menschen und dem Folgen zu thun hat.

(gez.) Dr Max von Pettenkofer
Königl. geheimer Rath u. Professor.

[ENCLOSURE]

[TRANSLATION FOLLOWS]

49

June 13th/83

Report of Dr. Max Von Pettenkofer in re-the illumination of the Royal Residence Theatre of Munich with Gas & electric Light

Munich

(B)

Illumination et Electricité

[ENCLOSURE]

[TRANSLATION]

1883-06-13

Munich June 13th 1883.

Hygienic Institute of the Royal Ludwig-Maximilian University Munich

Concerning the illumination of the royal residence-theatre of Munich with gas and with electric light

To Mr Philip Seubel, engineer of the Société Electrique Edison at present in Munich, George Street #4.

In the investigations, undertaken at your own and Professor Ernest Voit's request by the hygienic institute at the royal residence-theatre, with the view of comparing gas- and electrical illumination the temperature and carbonic acid of the atmosphere ~~was ascertained only towards~~ of the parquet, 1st balcony and gallery, were ~~made~~ simultaneously ascertained, both in the empty theatre as well as during performance.

I will first report on the results of investigating the temperature on the occasion of each specimen of artificial lighting. The tests with regard to carbonic acid, have, especially when made during the performance, led to results which will necessitate a number of additional tests at various points of the theatre, in order to insure reliability.

On the occasion of the tests ~~with~~ in the empty house, there were never more than 10 to 15 persons

[ENCLOSURE]

[TRANSLATION]

present both on the stage and in the auditorium, the curtain had been raised and both stage and auditorium were kept fully illuminated for an hour. The temperature in the 3 localities mentioned was ascertained every 5 minutes.

On the occasion of tests made during performances the ticket-taker's receipts proved the presence of from 500 to 600 persons in the auditorium and the state of temperature was ascertained every 10 minutes.

The temperature gradually rose both in the empty as well as in the full house from the minimum at the beginning to the maximum at the end, without any marked ~~irregularity~~ disturbance, as shown in the tabular list hereto annexed.

[ENCLOSURE]

[TRANSLATION]

Temperature of the atmosphere in the Royal Residence Theatre with gas- and with electric illumination

	Gas - Illumination						Electric - Illumination					
	I. Test May 2. 1883 Empty House Temperature in the open air 11,8° Celsius			II Test May 6th 1883 Full House Temperature in the open air 11,5° Celsius			III Test May 29th 1883 Empty House Temperature in the open air 17,6° Celsius			IV Test June 10th 1883 Full House Temperature in the open air 15° Celsius		
	Parquet	I. Balcony	Gallery	Parquet	I. Balcony	Gallery	Parquet	I. Balcony	Gallery	Parquet	I. Balcony	Gallery
Minimum	15,2	16,2	16,2	16,0	16,8	21,6	16,6	17,2	17,6	17,6	18,0	18,8
Maximum	16,5	19,4	25,4	22,2	23,6	29,0	16,9	18,0	18,5	19,6	21,2	23,0
Difference	1,3	3,2	9,2	6,2	6,8	7,4	0,3	0,8	0,9	2,0	3,2	4,2

[ENCLOSURE]

[TRANSLATION]

1883-06-13

The above furnishes conclusive evidence how much less heat is produced in the atmosphere by electric illumination than by gas-illumination.

The difference is, of course, largest when the house is empty. In a full house there occur, besides the heat developed by the actors and audience, various additional disturbances of the atmosphere:

The auditorium is illuminated before the ~~play~~ performance begins not so the stage. During the performance the illumination of the auditorium is greatly reduced, while that of the stage is increased according to the requirements. Between the acts this condition is reversed so that it is difficult to pursue these changes quantitatively.

For purposes of ~~accurat~~ reliable comparison the tests made in the empty house are therefor, strictly taken, alone decisive, as during the course of these tests there was no change in the illumination either on the stage nor in the auditorium and the curtain always raised.

These tests show, that in an empty house the ~~differ.~~ rise in the temperature of the gallery is 10 times (9,2 : 0,9) larger in gas-illumination than in electric illumination.

In the lower portions of the auditorium, these differences become, of course, less marked.

Even in a full house there is still a difference of 6 degrees Celsius, the temperature of the gallery in gas-illumination being found to be 29° Celsius (= 23,2° Réaumur) but only 23° Celsius (= 18,4° Réaumur) in electric illumination.

In the latter, the temperature of the gallery (23° Celsius) was not even as high as that of the balcony (23,6° Celsius) in gas-illumination.

[ENCLOSURE]

[TRANSLATION]

1883-06-13

5.

It is but just to add that on the occasion of the tests made with gas-illumination the temperature of the open air was lower than at the time the tests with electric illumination were made, so that the latter had not by any means the advantage.

With regard to the carbonic acid of the atmosphere I can only state that in the empty house the carbonic acid, evidently emanating only from the gaslight was noticed to increase at a rate similar to that of the temperature.

At the beginning of the test the carbonic acid of the atmosphere in the auditorium was found to be 0,4 pro mille. In gas-illumination after the lapse of half an hour:

in the parquet	0,5	pro mille
" " balcony	1,1	" "
" " gallery	1,4	" "

After the lapse of an other half hour:

in the parquet	0,6	" "
" " balcony	1,0	" "
" " gallery	2,0	" "

In electric illumination:

At the beginning 0,4 pro mille

After the lapse of an hour

in the parquet	0,5	" "
" " balcony	0,5	" "
" " gallery	0,6	" "

As the electric light of the Edison system does not produce carbonic acid, it's ~~increase insensible~~ scarcely perceptible

[ENCLOSURE]

[TRANSLATION]

6.

1883-06-13.

increase in electric illumination must have been due to the presence of a few workmen occupied on the stage and of those making the tests.

It was expected that in a full house an equally noticable difference in carbonic acid of the atmosphere in gas- and electric illumination, as in the case of the tests in the empty house, would manifest itself, which however was not the case.

In the full house the maximum of carbonic acid recorded was

in gas illumination	2,3	pro mille
" electric "	1,8	" "

The causes of this apparent contradiction are undoubtedly varied.

The carbonic acid emanated from two sources first of all from the gas-light and then from the people in the auditorium and on the stage. Both performance and between the acts produce uncontrollable changes, then there is a change of atmosphere whenever a door is either wholly or partially shut or opened, then again the different temperature of the atmosphere of the theatre and of the open air, particularly the greater heat in gas-illumination naturally produce increased ventilation especially the gasolier peeping from the ceiling of the auditorium.

In electric illumination there is, owing to the small difference in temperature between the atmosphere of the theatre and that of the open air, but little change of atmosphere, which does not permit the escape of the carbonic acid generated by the people

[ENCLOSURE]

[TRANSLATION]

1883-86-13

7.

to such an extent as is the case with gas illumination.

The increased ventilation caused by the latter is probably the reason, why the difference of temperature in gas- and electric illumination was found to be less marked in a full house, than in an empty one.

From the aforesaid tests the following two conclusions have been arrived at to a certainty:

1) that electric illumination prevents to an eminent degree an excess of heath in the atmosphere of a theatre.

2) that electric illumination, although unable to render ventilation unnecessary, requires less ventilation than gas illumination, for the reason that in gas illumination ventilation has to be directed not only against the vitiation of the atmosphere by the people, but also against the heat and the products of combustion of the gas-light; while in electric illumination ventilation has only to influence respiration, perspiration and their consequences.

(sig.) Dr. Max von Pettenkofer
Royal Privy Comsellor and Professor.

1883-06-21

KESSLER & Co
BANKERS,
P. O. Box 1105.

CABLE ADDRESS:
"TYZEPHYRA, NEW-YORK."

68 Wall Street,

New York, June 21st 1883

Thomas A. Edison Esq.

Present

Dear Sir

In reply to your favor of this day we beg to inform you that we received this morning a cable from the Banque Centrale du Commerce of Paris as follows: Pay Edison £3000 for account of, irry; the last word is remembert modified not as given here the best way we can make it out.

We beg to enclose our check for £3000 against which please return the receipts in original & duplicate, should you know from what account the payment is made please fill out receipts accordingly.

We remain

Dear Sir

Yours very truly

K Gold & Co

U.S. please send receipt to this office before 2 PM. we can receive to forward the same by this steamer

1883-06-21

June 21st. 3

Messrs. Koeslor & Co.

68 Wall Street, City.

Dear Sirs:-

I am in receipt of your favor of this date covering check for $3,000. The cable quoted by you conveys to me perfectly the information I require as to whose account the moneycomes. I return you herewith receipt signed in duplicate, and remain,

Very truly yours,

1883-06-21.

SOCIÉTÉ INDUS^elle & COMM^le EDISON

Société Anonyme. Capital : 1.500.000 Francs.

à Ivry s/Seine, 5, Rue du Parc.

Grand Diplôme d'honneur PARIS 1881

Ivry, le June 21st 1883

My dear Edison,

Enclosed find test 2 & 3. — No 3 is not good for life but I wanted to show it you just as we got it — I have had very much better

Yours Batch

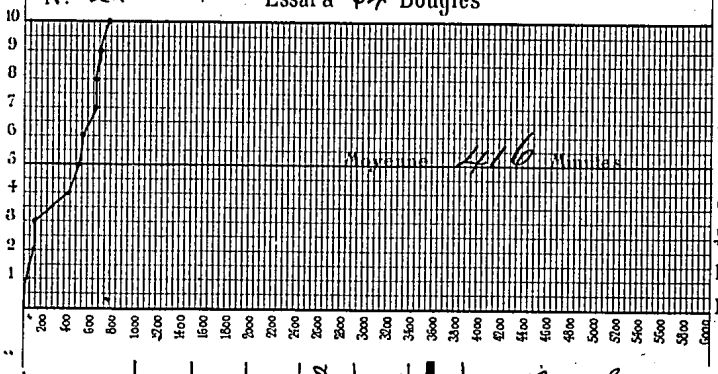
[ENCLOSURE]

June 16th 1883

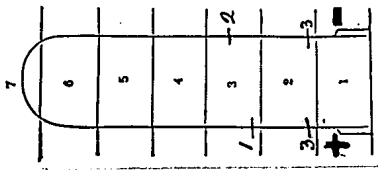
pour la SOCIÉTÉ Indusle et Commle EDISON

Chas Batchelor

N° 2. Essai à 64 Bougies

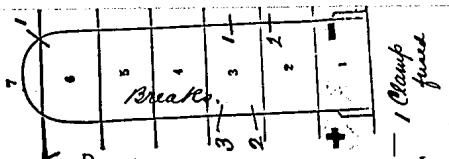


Lampes	A
Fabrication	6" x ·008 x ·017
Dimensions	June 1st 1883
Intensite normale	16 candles
Rès. à chaud	101.5 ohms
Volts	96
Courant en Amp.	0.94
~~Kilogrammètres~~ Foot lbs.	4048.
Lamp Chev. vapeur	8.1
Durée moyenne.	1039.75 hours

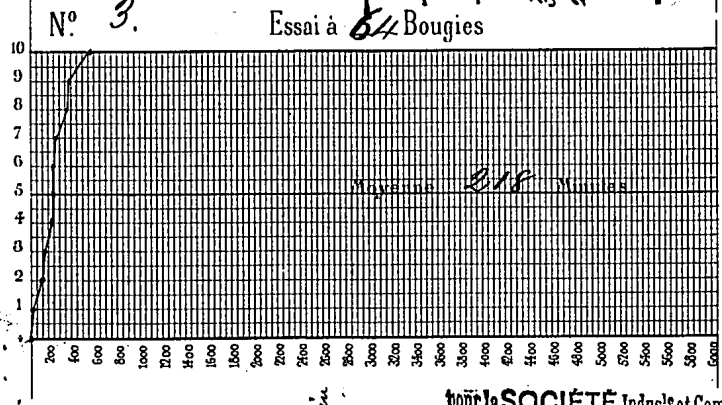


Breakage
9 broke at places indicated
1 clamp fused —

June 21st 1883.



N° 3. Essai à 64 Bougies



Lampes	A
Fabrication	March 6 1883
Dimensions	6" x ·008 x ·0135
Intensite normale	16 candles
Rès. à chaud	133.5
Volts	101.1
Courant en Amp.	0.76
~~Kilogrammètres~~ Foot lbs.	3432.
Lamp Chev. vapeur	9.61
Durée moyenne.	5.45 hours.

pour la SOCIÉTÉ Indusle et Commle EDISON

Chas Batchelor

69
92
136
190
221
312
322
511
21 4 9 min

1883-06-24

Hôtel Kaiserhof, Berlin, W.
June 24th 1883.

My dear Johnson,

I shall leave tomorrow for Melan[illegible] has mailed to day to Paris the propositions for the business in Russia with Siemens & Halske, which will completely kill off Swan and all other possible opposition for years in that country. A participation with Siemens & Halske is proposed for taking up the Nevsky Prospect concession, which is now in the name of Siemens & Halske and to place for the 1st September an Arc-light installation on the street of 32 lamps and an incandescent installation of 500 lamps, the latter to be increased to 2500 before the winter sets in; also to light one of the Royal Theatres, and contracts will be made at once for a central station in a grand bazaar where there are 12,000 lamps in a single building, and the land for the central station is given gratis. It is proposed further that Siemens & Halske and Edison participate equally in whatever business may be done in Russia. If the contract is made with Siemens & Halske for manufacturing we have half the profits of that and they participate equally with us in any profits we may make. How does it strike you? You know our situation in regard to patents is quite different in Russia from what it is in any other countries. Mersini, Swan & Lane-Fox have each of them patents and they are given in Russia with guarantee of the Government, and it is very difficult to get any reversal of a grant when once made.

I have written a letter today to Messrs Waterhouse & Winterbottom, asking them to send confidentially

1883-06-24

copies of the opinions of all experts in the Edison case in London to Mr Pouillet our lawyer at Paris for examination and saying that we will pay expenses for making copies. Our Mayer suit will be tried early in July and I shall be greatly obliged if you will say that there are no difficulties in the way of sending the papers as required they will be seen by no one but our counsel and experts and will not go to our office at all. I shall also be very much obliged if you will let me know the news of your operations in London or anything else that you think may be of interest. Will you also send me a copy of the Sweden, Portugal and Norway contract, initialled as you proposed in order that I may have an opportunity to write you concerning it before you leave for the States. When will be the date of your departure?

Negotiations as to the international affair are proceeding very favorably. I am assured the co-operation of a strong group of capitalists outside of those at present engaged with us in Germany and other important support in connection with Dr Siemens. One of the directors of the International Financial Society is going to Paris the 29th inst. to see me, but in my absence I put him in relation with Mr Léon. Should you go to Paris in the meantime you need not speak of it in the office as it would not be well at this stage of the negotiations to bring the gentleman in communication with Mr Porges and one or two others of our Board; so the matter will go on confidentially with Léon. Some large business has been already signed by the new German Company. They have a central station at Munich, one at Stuttgart and they are planning two or three here in Berlin. They are rather pugnacious and I have

1883-06-24
3

been occupied a considerable part of my time here in keeping the peace between Horn and Siemens & Halske I think it will go along all right.

Very sincerely yours

F. F. Bailey

E. H. Johnson Esq
Royal Hotel
Blackfriars
London
E.C.

Form No. 3

CABLE MESSAGE

THE WESTERN UNION TELEGRAPH COMPANY.

All CABLE MESSAGES received for transmission must be written on the Message Blanks provided by this Company for that purpose, under and subject to the conditions printed thereon; and on the back hereof, which conditions have been agreed to by the sender of the following message.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
51	gm	Nolan	10

Received at 701 BROADWAY

Dated Menlo Park 1880 Dec 31

To Edison NJ 655 Ave

Started station success tonight Manzoni theater lighted

Lees

To guard against mistakes on the lines of this Company, the sender of every message should order it repeated; that is, telegraphed back from the terminus of said lines to the Originating Office. For such repeating, the sender will be charged in addition, one half the usual rate of this Company, on that portion of its lines over which such message passes.

This Company will not assume any responsibility in respect to any Message beyond the terminus of its own lines; and it is agreed between the sender of the following Message and this Company, that said Company shall not be liable for mistakes or delays in transmission or delivery, or for non-delivery to the next connecting Telegraph Company, of any unrepeated message, beyond the amount of that portion of the charge which may or shall accrue to this Company out of the amount received from the sender for this, and the other companies, by whose lines such message may pass to reach its destination; and that this Company shall not be liable for mistakes in the transmission or delivery, or for non-delivery to the next connecting Telegraph Company, of any repeated message, beyond fifty times the same sum received by this Company from the sender for repeating such message over its own lines; and that this Company shall not be liable in any case for delays arising from interruptions in the working of its lines, nor for errors in cipher or illegible messages. And this Company is hereby made the agent of the sender, without liability, to forward the message over the lines of any other company to reach its destination.

This Company is not to be liable for damages in any case, unless the claim is presented in writing, within sixty days after the sending of the message.

YAWCIAOHING 105

June 2 1913

On cable

United States

through mainland

Alaska highlands

1883-06-28

SOCIÉTÉ ÉLECTRIQUE EDISON
SOCIÉTÉ ANONYME
Au Capital de 1 million de francs

EXPOSITION INTERNATIONALE D'ÉLECTRICITÉ
Paris 1881
GRAND DIPLOME D'HONNEUR

ADRESSE TÉLÉGRAPHIQUE
EDISON, PARIS

Paris, le 28 June 1883.

33, Avenue de l'Opéra

Samuel Insull Esq
New York

My dear Insull,

Thanks for information contained in your late letters — When I read your account of the cross on the main feeders in the down town district my first thought was "where were the safety catches?" Had you any there or how was it!

Should like to have a little description of ampere recorder that shows directly the number of lamps on at any one time. — Get it one if you can —

Please ask Holzer to send me the good records of lamps that he has got and also specify the economy. None of the diagrams sent me tell me anything about economy and of course although the life may show good I cannot tell whether the fibre is right life especially as all those that I brought are 1-2 thousandths to wide one way

Yours
Batchelor

1883-06-28

SOCIÉTÉ ÉLECTRIQUE EDISON
SOCIÉTÉ ANONYME
Au Capital de 1 million de francs

EXPOSITION INTERNATIONALE D'ÉLECTRICITÉ
Paris 1881
GRAND DIPLOME D'HONNEUR

ADRESSE TÉLÉGRAPHIQUE
EDISON, PARIS

Paris, le Juin 28th 1883.

33, Avenue de l'Opéra

Thomas Alva Edison Esq.
New York.

Dear Sir

I have [illegible] pleasure of referred to your favor of [illegible] 14th informing us that you have received the visit of Mr. von Mueller to whom you have given every facility for seeing the system and visiting your shops.

We thank you very sincerely for your kindness and remain,

Dear Sir,

Yours very truly

SOCIÉTÉ ÉLECTRIQUE EDISON

Administrateur délégué

Form No. 3

CABLE MESSAGE.

THE WESTERN UNION TELEGRAPH COMPANY.

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THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
39	Co	12 Milano	900

Received at 191 BROADWAY

Dated June 29 1883

To Edison NY 65-5 ARG

Inaugurated yesterday Station illuminating theatre Great success

Colombo

E.

1883-06-29

Société d'Appareillage Électrique

Genève, le 29 Juin 1883

Messieurs Bergmann & Cie
108-114 Walker Street
New York

Messieurs

Nous sommes en possession de votre lettre du 21 Mai, nous annonçant votre envoi de 6 catalogues

Ne l'ayant pas reçu jusqu'à présent nous avons pensé qu'ils étaient égarés & nous avons télégraphié hier

"Bergmann Edison
New York
Send catalogues Appareillage"

Nous vous prions également de nous adresser si vous le pouvez au prix courant des machines Edison ainsi que des lampes de diverses sortes & contenances.

Veuillez agréer, Messieurs, nos salutations empressées

SOCIÉTÉ D'APPAREILLAGE ÉLECTRIQUE
A GENÈVE

Wohlers

(over)

Mr Insull

These parties want price list of Edison machines and also of lamps of different volts (force they call it) and colors. I have written them that I had referred their letter on those points to you.

W H Klein Jr

10.

June 19 1883

W. H. Klein
Refers letter of
Western Society of Applicants
Chicago inquiring for
Edison's said letter
referring to the
incandescent lamps.

1883-06-30

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ELECTRICITÉ
Grand Diplôme d'honneur
PARIS 1881

Ivry-sur-Seine, le 30 ch. June 1883
5, RUE DU PARC.

T. A. Edison Esqre
New-York.

My dear Edison,

Referring to mine of 11 ch. inst. in which I complained of the careless manner in which the shipment from the lamp factory was made I am sorry to have to trouble you again on the same subject.

This shipment was made through Hayward Perry & Francklyn, New-York and you will see from enclosed note that the firm charged on the outrageously exorbitant sum of £4.17/- as freight on a case weighing scarcely 2 cwt; besides they have sent this case flying all over England & France by Express train and these additional charges we have had to pay as well, although the shipment has been as long on the way as if it had come by the ordinary route; at the lamp factory they well know that we are never in such a hurry to receive goods as to necessitate sending them by passenger trains.

Will you be kind enough to obtain any explanation from Hayward's people of the £4.17/- and if they refuse to

refund the overcharged freight the best thing will be to send the shipments by another line as we find that generally speaking we pay too much freight on all our shipments. If Downing Sheldon & Co is a good respectable firm we could have a trial shipment through them.

In conclusion I cannot recommend you too strongly to see that full particulars of all future shipments be sent us in due time, both as regards contents of cases & the route they come by.

Yours faithfully

Ma Batchelor

to
June 30/83
C Baker
re shipment
to C Batchelor

If they will give you $2000 or 2500 you can contract with Italia a 3 year contract

Don't use accumulators, use an improved feeder there to show me how they can calculate what you can drop in order to regulate by drop in order to table

Milan Italia
July 1st '83

Thomas A. Edison, Esq,
Dear Sir;

At last after seven months of waiting I have the pleasure of announcing the starting of the Milan Central Station. On the evening of June 28th the Commitato invited the representative people of Milan to an entertainment at Teatro Manzoni on which occasion the Theater was for the first time formally opened to the public. The entertainment consisted

1883-07-8

of two Comedies arranged to show the effect of the light on the costumes, and a Mandolin Concert.
Between the acts an exhibition was given to the audience of the regulation of the lights on the Main Hall, foot lights and upon the Stage the public receiving the display with great applause.
The press was very enthusiastic over the success of the opening and urged the immediate adoption of the system in all the Theatres. We had in all about 362 A lights in the Theater, distributed as follows:

Portable Lamps on Stage	42 A
Reflectors " "	10 A
Foot lights	40 A
Orchestra 1 A	26 B.
Hall & Gallery	87 A
Vestibule	27 A
Cafe	7 "
Street Lamps	4 of 32 Candle Lamps
Portico	7 " 1 of 100 Candle
Boxes	36 A
Artists Rooms &c	36 A & 70 B

Total 286 A
96 B
11 (32)
1 of 100

The Dynamo supplied in addition 90 lights in the stores of the Galleria Vittorio Emanuele and at the Station I added a permanent load of 200 lamps more to effect a better regulation.
The Machines were in a very bad condition when they arrived here; the Magnets on account of exposure to the weather in transit were very damp. They have dried out now and have greatly improved. The Engines were also out of line with the Dynamo when they were fitted to the

Base plates at the Machine Works and it was necessary to regrind them.
We have at present the Two Porter-Allen Engines in working order; the A & S Engines will be ready in 2 or 3 weeks. To morrow (July 22nd) we begin lighting regularly from the Station starting with a load of 200 Lamps which number will be rapidly increased in a short time.
All has gone well thus far the Dynamos starting up without any trouble or delay of any kind. I have experienced great difficulty in getting men to assist me in my work as those

possessing intelligence are above working themselves and not well enough posted practically to see that the work is properly done. In this respect the Lemiffats are not very fortunate as their Engineers have no practical experience and consider themselves above doing the work necessary to obtain it. They sent a man (a Professor at a small college here) to put up a 25 light plant in Naples; it took him 20 days to start it and in one week broke 40 lamps. This is only a specimen case. I am using a differential galvanometer as a pressure indicator putting a german silver resistance

in Circuit with one Coil and a Lamp or a Resistance in circuit with the other; it appears to work well. The district line is not supplied with Galvanometer wires at Feeder extremities and Feeder Regulators are therefore almost useless unless an indication of some kind is secured at the Feeder terminations. What do you advise me to do in this connection?

Prof. Wolcombe seems to be very much in favor of using accumulators in connection with Station and has spoken to me about making experiments with that end in view.

Prof. Wolcombe has spoken to me about accepting a permanent position with the Italian Company, although as yet they have made no definite offer. Am I at liberty to accept if their terms are acceptable to me or must I await your further orders?

Hoping you will keep me advised of any improvements in Central Station working I remain

Yours very respectfully

John H. Lieb Jr.

1883-07-02

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ELECTRICITÉ

Grand Diplôme d'honneur

PARIS 1881

Ivry-sur-Seine. le 2nd July 1883

5, RUE DU PARC.

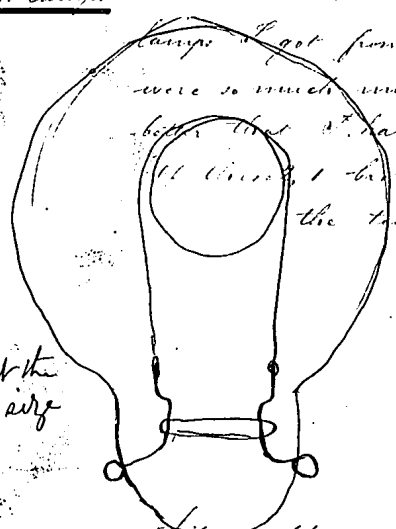
E. A. Edison Esqr.
New York.

My dear Edison

Swan Lamps

I send you the result of a test of 2 Swan lamps I got from London. Everybody was saying that they were so much more economical than ours and so much better that I have ordered 10 for life test.

It chanced I broke during testing before it came to 16 candles, the test of the other is as follows:—



about the full size

	16 candles	10 candles	15 candles
Resist. cold	194.5		
" hot	98.6	97.9	96 ohms
Volts.	95.5	97.5	102.
Amperes	0.96	0.97	1.06
foot lbs.	4136	4268	4840
lamps per H.P.	7.9	7.7	6.8.

Life at 64 candles: 575 minutes — 125 Volts

Dia. of fibre after carbonization $7\frac{1}{4}$" X .009 —

Section ⊙ circular. After 200 minutes I increased it last candle power and on testing found 50 candle

Patterson. I understand that Patterson has applied to Colonito for employment saying that there was nothing to do in

1883-07-02.

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ELECTRICITÉ

Grand Diplôme d'honneur
PARIS 1881

2

Ivry-sur-Seine, le 2nd July 1883
5, RUE DU PARC.

(Cont.)

America and that the companies had no money to do anything with. These kind of letters give our people bad impressions.

The lamp. I understood from Mr Navarro & Dr Moses that I should be sent 6 arc lamps to Antwerp, and, from the latter, that I should have from Bergmann & Co one lamp all in pieces to make my patterns from and that I could make it up again and send it out of the country.

I have, as yet, heard nothing about them; have you shipped them?

Have you done anything more on your arc lamp that will go on our circuit? If so, let me know immediately, as arc lights are much more necessary in some countries of Europe than America.

Yours truly
Chas Batchelor

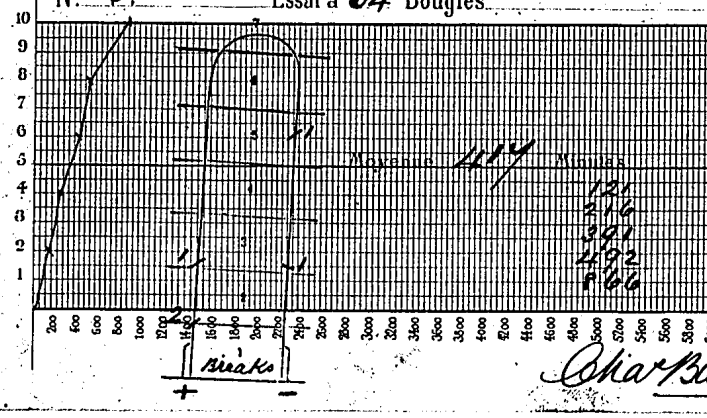
1883-07-03

SOCIETE Indus^le et Comm^le EDISON

Ivry sur Seine
Manufactures 3 July 1883

5 lamps..

N° 6 Essai à 64 Bougies



	16 cp.	64 c.p.
Lampes	A16	
Fabrication		
Dimensions	6" X .015	X .004
Intensite normale	16	
Rés. à chaud	101.	97
Volts	97.8	121.5
Courant en Amp.	0.979	1.288
Kilogrammètres	9.7	15.8
Lamp Chev. vapeur	7.6 pro.	4.7 min
Durée moyenne	1043	414

Chas Batchelor

1883-07-05

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ELECTRICITÉ
Grand Diplôme d'Honneur
PARIS 1881

476

Ivry-sur-Seine, le 5 July 1883
5, RUE DU PARC.

Thos A Edison Esq
New York —

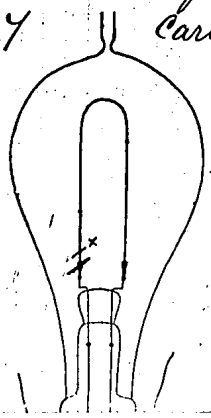
My dear Edison,

I have had an analysis of our lamp breakages on pumps made and I thought it might be of interest to you.

Of all the lamps we put on pumps we have
91·2 good for testing
8·7 bad by breakage or other cause.

I have classified all these bad lamps as follows:—

1st Pump broke.
2nd Mercury ran up in lamp or,
Phosphoric anhydride up in lamp.
3rd Spots and bright places in Carbon
4. Accident in any way such as bad handling etc
5 Stoppage of Mercury pump (breakdowns etc)
6 Broke from irregularity of current
7 Carbon broke at x and the clamp begun to fuse.



SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ELECTRICITÉ

Grand Diplôme d'honneur

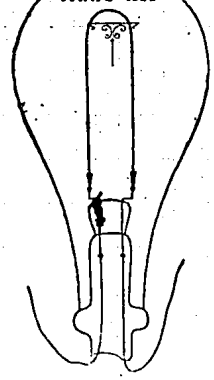
PARIS 1881

2

Ivry-sur-Seine, le

5, RUE DU PARC.

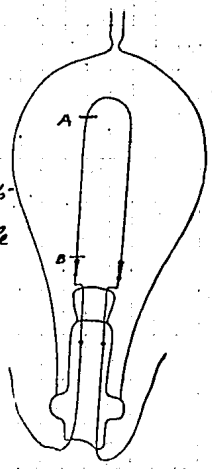
8

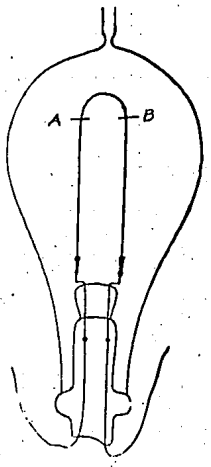


Platinum wire fusing glass cracking where marked

9

Carbon broke between the points A + B one single break.



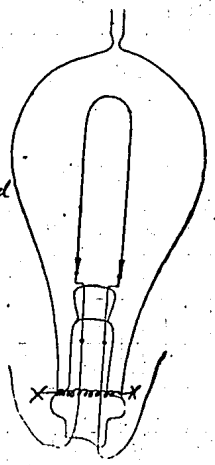


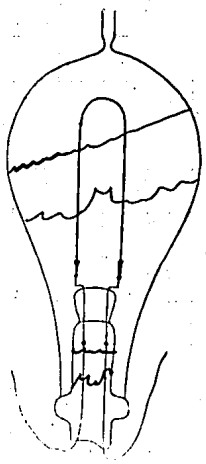
10

Carbon broke between A + B one single break.

11

Lamp cracked at sealing marked x x





12

Lamp exploded entirely where ~~the~~ marked

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ELECTRICITÉ

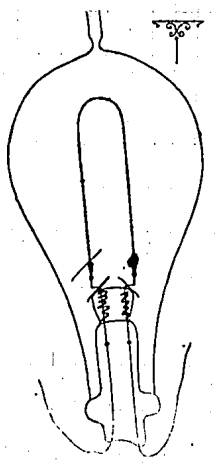
Grand Diplôme d'honneur

PARIS 1881

3

Ivry-sur-Seine, le

5, RUE DU PARC.

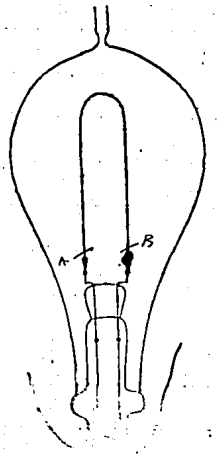


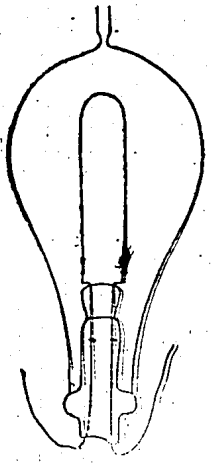
13

Both platinum wires fused in glass & clamps fused

14

Carbons broken by air rushing in when taking off the pumps (between A & B





15

Carbons broken by man who seals off in any manner.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total Broken
A 10	5	5	4	9	7	1	8	34	86	4	2	4	2	3		174
A 16	49	24	21	67	18	15	30	71	97	7	15	27	19	10	6	475
A 32	14	4	5	7	21	2	22	64	24	2	3	11	11		3	193
B 8	66	9	12	17	46	14	13	38	118	3	4	5	4	2		351
B 16	3		5	10	15	4	9	9	7			3	1			66

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ELECTRICITÉ

Grand Diplôme d'honneur
PARIS 1881

Ivry-sur-Seine, le
5, RUE DU PARC.

4

As regards No 1 better pump glass from america has improved that wonderfully
As regards No 5 our new engine fixes that — (now running).
As regards No 6 " " " " "
As regards No 8 most of this is due to French glass.
As regards No 9. this is large am hunting causes
As regards No 11 Very small considering the Glass we have had.
As regards No 12 in many cases due to uneven thickness —

Very respectfully Yours
Chas Batchelor

1883-07-05

We are absolutely busted!

SOCIÉTÉ INDUS.elle & COMM.le EDISON

Société Anonyme. Capital : 1.500.000 Francs.

à Ivry s/Seine. 5. Rue du Parc.

Grand Diplôme d'honneur PARIS 1881

Ivry, le 5 July 1883 188

Samuel Insull Esq
New York

My dear Insull,

As you know I own $5000 in the shares of the European companies which have been paid for by a gentleman here & held for me — He now wants his money and I am called on to pay him — I need not say that I have not the 'spondulicks' and I feel bound to pay the honorable gentleman his money. If I gave you a few European could you sell them for me & could you raise the money temporarily on a few American — You may mention this to Edison if you like

Yours Batchelor

1883-07-05

Milan 5 July 83

My Dear Mr. Edison:

I beg you will take the time to read my letters dated 20 June & two dated 5 July, sent to Maj. Eaton, also that on Italian business mailed three days ago.

Yours very sincerely

J. F. Rowden

1883-07-06 Upton to Edison

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ELECTRICITÉ

Grand Diplôme d'honneur 480.

PARIS 1881

Ivry-sur-Seine, le 5, RUE DU PARC

July 6 1883

Mr. A. Edison

Reply to Upton for Newyork answer this information

My dear Edison,

I am a good deal worried about the life of our 10, 32, 50, & 100 candle power lamps — I do not know whether this is new to you, but our ordinary 6½ x .008 x .017 fibre when carbonized has a surface of $\frac{14}{1000}$ of a square inch for every candle of light; our 10 candle since you made it 6" long has still only $\frac{11}{1000}$ of a □ inch surface per candle; our 50 candle has only $\frac{6}{1000}$ of an inch and the 100 candle has $\frac{4}{1000}$ — Whoever calculated the fibres did not take into consideration that all fibres of bamboo shrink in carbonization 50 per cent in width; whilst in thickness they only shrink 28 per cent; and in length 22 per cent — If Upton will study these differences of shrinkage he can make a much better carbon for different candle power — It is not difficult to keep the surface per candle power the same & still keep same resistance

Very truly yours

Chas Batchelor

55 East 9th St

1883-07-06

DEUTSCHE EDISON GESELLSCHAFT
für angewandte Elektricität.

Direction.

96. Leipziger Strasse
BERLIN W., den July 6th 1883

Thos. A. Edison Esq

Dear Sir.

Allow me to introduce to you the bearer Dr Ernst Hagen who has been appointed by the municipal authorities of Berlin to visit, inspect, and report upon the problem of Incandescent-Lighting as solved by you in America

The municipality owns and controls the gas of Berlin and they are at present very much interested in the present state & future prospects of the Incandescent-Light as as you may well judge Dr Hagen's visit will have no slight bearing upon future relations between the Deutsche Edison Gesellschaft and this powerful organization, I know he will receive every attention and courtesy from the Edison people in New York and as he comes highly recommended by Prof Helmholtz, Dr Siemens & others & brings also an official introduction from our Co, it is scarcely necessary for me to write as well but Mr Rathenau has requested me to pen yourself & Major Eaton a few lines

Mr Rathenau gave me recently your last letter in which you request that he will keep you informed upon the progress & general state of the Company's affairs from time to time and he has requested me to undertake this responsibility and I shall at an early date write you a letter in full relative to the present state, and future prospects and will endeavor to keep you well informed from here, with very sincere regards I remain

Yours respectfully

Wm. J. Hammer

Chief Engineer
D.E.G.

2092.

1883-07-06.

DEUTSCHE EDISON GESELLSCHAFT
für angewandte Elektricität.

Direction.

96. Leipziger Strasse
BERLIN W., den 6th July 1883

Dear Sir

The present is intended to introduce to you, recommending him to your kind attention, Dr Ernst Hagen, of Berlin who has been deputed by the Municipality of this City to visit your country chiefly with the object to obtain information about and to study the system of Electric Lighting which under your leadership has taken the old world and the new by surprise.

We are assured that you will do all in your power to provide Dr Hagen with the necessary facilities for gaining his object and to enable him to obtain the most minute details on everything connected with electric lighting.

We are

Dear Sir

Yours faithfully

DEUTSCHE EDISON GESELLSCHAFT
FÜR ANGEWANDTE ELEKTRICITÄT.

E Mallmann Dr Hugo Pischon

Thos. Alva Edison Esq
Menlo Park
New-York. U.S.A.

Copirt.

Form No. 1.

1883-07-09

THE WESTERN UNION TELEGRAPH COMPANY.

This Company TRANSMITS and DELIVERS messages only on conditions limiting its liability, which have been assented to by the sender of the following message. Errors can be guarded against only by repeating a message back to the sending station for comparison, and the company will not hold itself liable for errors or delays in transmission or delivery of Unrepeated Messages, beyond the amount of tolls paid thereon, nor in any case where the claim is not presented in writing within sixty days after sending the message.

This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
2 P	an	Rm	10 1 Pd

Received at 8-05-50 7/9 1883.

Dated New York N.Y. 7/9

To Thos A Edison, City Hotel

Have just recd following from Bailey "Cable date and price will ship two certainly perhaps four jumbos genoa quote lowest possible cable ends" Why not sell machines at present in shop without any experimenting for increased capacity we cabled Bailey in February would

Form No. 1.

1883-07-09

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This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
7a f			

Received at 1883.

Dated

To

sell four jumbos ninety seven hundred and fifty dollars each job hamburg delivered thirty days after order would strongly advise quoting ninety two hundred & fifty each machine fob New York because freight rates to Genoa uncertain this would enable us

1883-07-09

Form No. 1.

THE WESTERN UNION TELEGRAPH COMPANY.

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This is an UNREPEATED MESSAGE, and is delivered by request of the sender, under the conditions named above.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK

Received at _____ 1883.

Dated _____

To _____

keep London Company out & create good impression by selling their machines answer tonight waiting reply at office

Insull

1883-07-12

SOCIÉTÉ INDUS^elle^ & COMM^le^ EDISON

Société Anonyme. Capital: 1.500.000 Francs.

à Ivry s/ Seine. 5, Rue du Parc.

Grand Diplôme d'honneur PARIS 1881 — 488 — Ivry, le 12 July 1883

Mr. T. A. Edison Esq.

Newyork.

My dear Edison,

Please find enclosed test of 6" x .008" x .004" our make for beginning July

Yours

Chas Batchelor

1. Enclosure.

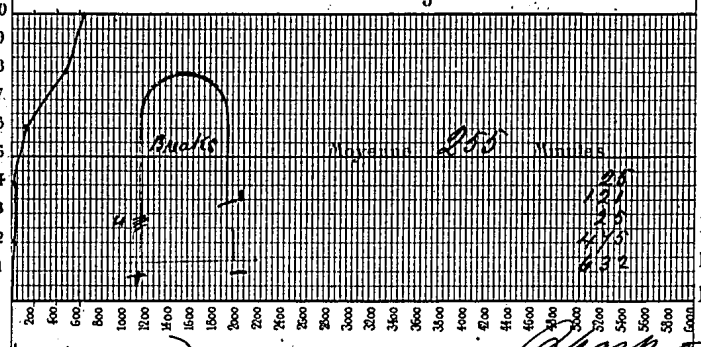
[ENCLOSURE]

T. A. Edison Esq
65 05th Avenue
New York

1883-07-10

SOCIÉTÉ Indusle et Commle EDISON

N° 10 Essai à 32 Bougies



Lampes	B 8 cp.
Fabrication	10 July 1883
Dimensions	3" x .008" x .014"
Intensité normale	8 cp.
Rés. à chaud	42.13
Volts	54.4
Courant en Amp.	0.79
Kilogrammètres	4.4
Lamp Chev. vapeur	16.2
Durée moyenne	638 hours

This is not very good —

Chas Batchelor

1883-07-12

SOCIÉTÉ ÉLECTRIQUE EDISON
SOCIÉTÉ ANONYME
Au Capital de 1 million de francs

EXPOSITION INTERNATIONALE D'ÉLECTRICITÉ
Paris 1881
GRAND DIPLOME D'HONNEUR

ADRESSE TÉLÉGRAPHIQUE
EDISON, PARIS

Paris, le 12 Juillet 1883.

33, Avenue de l'Opéra

Thomas A. Edison Esq.
New-York.

Dear Sir,

We beg to confirm our letter of the 11th inst. and to inform you that we have been charged by the German Edison Co to ask you if you could send them a good Director for the Lamp factory they wish to establish?

Please let us know also which terms should be asked by this Director to the German Co?

We remain, Dear Sir,
Yours faithfully,
SOCIÉTÉ ÉLECTRIQUE EDISON

ADMINISTRATEUR DÉLÉGUÉ

Impossible for us to do so at present as we may want our business here [illegible]

1/

Insull - draft letter to say I will resume 1883-07-16
I am satisfied. Everything is explained by the enclosed letter

Berlin July 16-83.

My Dear Mr Edison.

I enclose herewith a letter which I have been requested by the Co's Chief Director Mr Rathenau to write and as I have heretofore refrained from writing to you upon personal matters although frequently intending so to do, I will only state one or two things here which may set aright certain false impressions you seemed to have relative to my connection with London affairs

Firstly - I never said that unless my salary was raised I would leave the English Co - the fifty Pounds (50£) tacked on to my 450 salary was done by White and was a surprise to me

Secondly - I was promised by White though I had not myself mentioned it that when the Stock was issued

2/

1883-07-16

I was to receive along with Dr Hopkinson & Dr Fleming some shares this he stated was spoken of by the Directors

Thirdly. I considered that as I had given my whole time night & day to the Co's service, paying all my meal & journey expenses &c from my own pocket that the Company should reimburse me and I told White as the Co, had promised me a stock interest I desired to make such an investment but had not the means wherewith to do it, through his intervention as you know the Co made me a present of 250£ enabling me to make an investment in the stock promised than still a satisfactory surplus, Now it is unnecessary for me to say that Companies do not give presents of this character for nothing and no one cognizant of the work done

by me at the Crystal Palace, Holborn Viaduct & I will say I did not ~~&am~~ every penny of it.

If you want to know why I resigned from the Co, leaving a splendid position, fine prospects & a large salary & I will give you a short answer - an answer which might apply to most of the disagreable troublesome things connected with the English Co, it is - Arnold White - I will say however that you are enough of a judge of human nature to know I did not it for any petty fit of temper - spite - or pride

If you want to know why I after leaving the English Co, thinking I remained in London doing little besides writing & reading, refusing seven (7) distinct outside offers two of which offers would have

given me a higher salary than that of the Edison Co & finally spending every penny (& more too.) which I possessed & had saved - not in "riotous living" for my time was well spent though I earned but little - I will tell you that it was in order that Thomas A. Edison & Edward H. Johnson should not misinterpret my actions & motives & understand that I intended to stick to the Edison ranks and before doing anything else - cost what it may - set myself aright in their eyes. I know Mr Johnson whom I count as one of my best friends and moreover a man of the kind of grit and gumption stuff not many men are made of - has spoken to you as he promised to do to you and I want further to say that while I have plenty

5/ 1883-07-16

of pluck, perseverance & hard work to keep my chin above water I am anxious that one who has worked, is working & will work so hard for Mr Edison's interests shall be justly judged for that is everything to him I assume for.

- I will close now hoping perhaps you will drop me a personal line in return with sincere respects

I remain

Yours very truly.

Wm. J. Hammer

Chief Engineer

Deutsche Edison Gesellschaft.

Berlin

96 Leipziger Strasse

To Thos. A. Edison.

65 Fifth ave

New York City

U.S.A.

[ENCLOSURE]

1883-07-16

J. No.

DEUTSCHE EDISON GESELLSCHAFT
FÜR ANGEWANDTE ELEKTRICITÄT.

INTERNATIONALE ELEKTRISCHE AUSSTELLUNG
GROSSES EHREN-DIPLOM
Paris 1881.

TELEGRAMM-ADRESSE:
Edison Berlin.

Reichsbank Giro-Conto.

BERLIN W., den Berlin July 16 1883
96 Leipziger Strasse.

My Dear Mr Edison

In a recent letter to Mr Rathenau you requested that you might be kept acquainted with the work which the German Edison Company had in progress and under consideration from time to time and Mr Rathenau has requested that I shall assume this responsibility which I do with pleasure and I will endeavor to keep you posted upon all matters relative to our company's operations which will prove of interest to you, At present our operations are not very extensive as the practical organization of the Company has but just been effected but we look for great things in the near future & believe we have the practical monopoly for the Incandescent-Light in the German Empire, The company has but recently completed several installations in different parts of Germany and has now in hand a number of others both inside & outside of Berlin a further

[ENCLOSURE]

1883-07-16

2/ reference to which I will make at another time as there are many important topics which I shall have to refer to, We have a very fine though small Installation of the Edison Light at the Berlin Sanitary Exhibition and it is one of the principal features of this successful & largely patronized Exhibition, We shall send you further information of this also, Next we have here in Berlin two important Club houses the Resource and the Union Club lit up with the light the former employing a "Z" the latter an "L" Dynamo We have just completed the plans for a Central Station which will be commenced upon this week which will take in both these clubs which will employ the light hereafter throughout the entire buildings and also take in the Berlin Aquarium and an adjoining private house, besides this small installation we have also under consideration a larger installation situated in the centre of a large and important block of buildings which on account of the character of the business carried on i.e. (Cafe's Restaurants, Hotels Stores & Private houses) will give us a large number of lamps hours the property we have in view for the Central station will allow of our employing three (3) of the "C" or Central Station Dynamos.

[ENCLOSURE]

3/ There is also a project under consideration which 1883-07-16
is I believe the largest of its kind as yet
brought forward although it is almost too
early to make any definite statements con-
cerning it; It consists of a project for estab-
lishing a Central Station for fifty thousand
50,000 Lamps which will take in one of
the most important centres of Berlin and
include
include some of its principal Governmental buildings
There are a number of other projects on foot
for Central Station Isolated Lighting of which
I will let you know hereafter, but I am cer-
tain in a short time you will see that
the Edison people in Germany do not lack
enterprise and that the Company is in the
hands of men of energy and ability; The Co.
has recently taken very fine offices upon one
of the principal corners in Berlin has appoint-
ed agents throughout the Empire and is now
engaged in a systematic course of adver-
tising in the principal Technical, Trades
other Journals in order to bring the Edison
light before the people still it is con-
sidered of a vital importance that the
Company should have installations and

[ENCLOSURE]

4) and above all a Central Station in operation in Berlin as a practical demonstration of the capabilities and commercial value of the Edison Light, this done in Berlin we fear nothing elsewhere. Now leaving the further discussion of the Co's projected work for a future occasion I will speak of a number of important matters which relate to other affairs. 1883-07-16

Plans, Blue Prints &c

I Will you kindly have a set of all drawings, Blue Prints &c relative to Central Station work, Town Plant work &c sent to us at once You will see the importance of this from my letter and I beg to state that in these matters the Company desires to look to New York rather than to Paris & other Companies and Mr Rathenau requests me to say that the Co here feels these things are its due but they are very willing to bear any expense consequent upon the preparation & completion of them

Estimates &c

II We should like also copies of any estimates for construction & maintenance of Central Stations of various numbers of lamps including any statements you may possess relative to the Central Station in New York for our guidance in our work here,

[ENCLOSURE]

5/ III We should like to know if you consider it necessary in the event of our starting a Central Station such as I have herein mentioned that we should lay it out similar to your plan of German silver coils made at Menlo Park & since made by Mr Batchelor or do you consider that if plans, distances, approximate distribution of lights &c, were sent either to New York or Paris such an Estimate of proper distribution, main feeding points &c could be made

1883-07-16

Distribution system.

IV We have just sent to Paris for a complete set of samples of the new three wire system of distribution and we shall be glad to hear from you the results of any Experiments, Estimates &c based upon it; I will also say that Mr Rathenau wishes that at any time as new features and improvements are made that you will send us at once samples of same and inform us (by cable if necessary) of any changes desirable, I have mentioned this in a recent letter to Bergmann & Co & we trust we shall always get at once the latest & the best and I might also add that we

Three wire system Samples &c

[ENCLOSURE]

1883-07-16

Forwarding Goods

6// hope our recent order will be filled and forwarded as soon as possible, Please see that all B Heo's cases and all from Machine Works are carefully addressed, classified, & numbered with some distinguishing marks thereon for our guidance I remember we had at times much trouble from want of this care in London now especially in material received from Gorick St,

Bulletins &c

V. Please have a package of all the back Bulletins sent us and as each number is issued please see that we receive a number, I have mentioned this in a letter sent to Major Eaton but mention it again to you as we have none of the numbers at present

Lamp Factory.

VI. Another important undertaking the Company now has in view is the establishing of a Lamp Factory and the Directors desire that you will send us at once the best man you have who is capable of organizing & taking charge of our factory and if you have such a man whom you can spare but for a time the Company would like him at least to

[ENCLOSURE]

1883-07-16

(7) remain until things are in running order and we have a man of our own in charge.

VII The Company desires also an estimate of what you would furnish complete for an Installation Lamp Factory for Germany capable of supplying five hundred 500) Lamps per diem, this to include the Archimedes Pumps, & piping complete, Resistance Boxes for Pumps, Regulating devices, and in fact all the machinery tools & appurtenances for the Glass Blowing, Plating, Mounting, Plaster fitting & all departments save in the Carbonizing & Fibre - as we shall probably get our Carbons ready for mounting direct from Paris. This estimate it is scarcely necessary for me to add we desire at earliest possible date. and in the event of our at once securing a man from you he must come with all necessary plans samples &c in order that our company may not repeat the great delays and enormous outlays of the Co in France & while we trust greatly to profit by both their & your experience we prefer as far as possible to deal directly with you in these matters and feel assured of your assistance.

VIII July 17-83 I have just shown this letter to Mr Rathenau. and he has approved of it and

[ENCLOSURE]

1883-07-16

S/ requests me to add one or two things further, firstly please send us at once an Estimate for supplying in large quantities the outside bulbs

Lamps.

The inside parts with platina wire & clamps already prepared for mounting carbons in so- and also what you will furnish us in large quantities the Carbons all ready for mounting, as we desire if possible to make such an arrangement with you if possible for this will facilitate greatly the starting of our lamp factory & getting it in good running shape

Man

IX. Please cable when we can expect man from America

Cash

X. Mr Rachman says we can at any time deliver for cash in New York through representative bankers there upon statement of delivery of goods.

Dynamos.

XI. The new "K" machine is on way now to Siemens & Halske will test before taking another machine not heard from as yet, as we have no stock of Dynamos must have at once please hurry up other models as fast as possible

[ENCLOSURE]

XII. 1883-07-16

Mr Rathenau suggested the idea of using in a central station a separate condenser for all the engines which are to driven by an independant engine he estimates a saving of 25% at least thereby, what do you think of it? also do you not consider that there is a valuable income to be derived from employing steam in heating during mild months in connection with lighting thus effecting a great saving in running expenses in the day.

Steam

XIII. What do you think of compound wound machines? nearly all the principal makers are using them & we believe there is much in them. Dr Lawrence in a recent paper publishes tests showing the perfect regulation, & Crompton of London also has. Have you made any experiments upon this line and do you not think it cheaper, more reliable & less complicated than the automatic regulator. I will now close with very sincere regards from all the people here remaining very truly yours

W. D. Hammer

1883-07-17

J. No. 2790

DEUTSCHE EDISON GESELLSCHAFT

FÜR ANGEWANDTE ELEKTRICITÄT.

INTERNATIONALE ELEKTRISCHE AUSSTELLUNG
GROSSES EHREN-DIPLOM
Paris 1881.

TELEGRAMM-ADRESSE:
Edison Berlin.

Reichsbank Giro-Conto.

BERLIN W., den 17th July 1883
96 Leipziger Strasse.

Write & say he have attend to every request of Mr Hammer & will continue to give all the aid possible — Edison

Dear Sir

By our respected Mr Hammer write you to-day an extensive letter to which, while confirming it, we beg to call your very best attention as the matter it contains is of very great importance to our business.

We trust that Germany will soon take the lead in Electric lighting on this continent and we want to be in a position to carry out all the work connected therewith in first rate style.

Mr Hammer having exhaustively expressed our views and desires regarding the different matters we abstain from again referring to any of them and merely beg you will do all in your power to assist him in our endeavours.

We are, Dear Sir

Yours very truly
DEUTSCHE EDISON GESELLSCHAFT
FÜR ANGEWANDTE ELEKTRICITÄT,
Hugo Pischon

Thos Alva Edison Esq
~~Menlo Park~~
New York U.S.A.

Copirt

1883+07-18

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ELECTRICITÉ
Grand Diplôme d'honneur
PARIS 1881

Ivry-sur-Seine, le 18th July 1883
5, RUE DU PARC.

493

To A. Edison Esqr.
65 Fifth Avenue
New York.

My dear Edison:

New machines I called you to-day as follows:

"Mail immediately dimensions all new machines"

which I now confirm and await your reply.

As regards this cable you will remember that as you did not see fit to send the model I saw to Germany, I am without accurate details of your changes and am working on my own judgement. Please send me everything as you make the alterations so that our machines will always be alike in every particular & will interchange as near as possible.

Italian Co. Your letter to me on Italian affair, I have sent on to Baillie praying him to get a settlement of same immediately and, if not there to give me all the help he can to get it settled here. I hope this will be done in the briefest delay.

Yours faithfully

Chas Batchelor

1883-07-21

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ELECTRICITÉ
Grand Diplôme d'honneur
PARIS 1881

Ivry-sur-Seine, le 21st July 1883
5, RUE DU PARC.

Edison Lamp Co.
East Newark N.J.

Gentn

Enclosed please find order for the following fibers

5000 fibres cut	$6\frac{1}{2} \times \frac{8}{1000} \times \frac{17}{1000}$		which please send as soon as possible and collect from C.A.E. for our account
5000 "	$6\frac{1}{2} \times \frac{8}{1000} \times \frac{13\frac{1}{2}}{1000}$		
2500 "	$3\frac{1}{4} \times \frac{8}{1000} \times \frac{17}{1000}$		
2500 "	$3\frac{1}{4} \times \frac{8}{1000} \times \frac{13\frac{1}{2}}{1000}$		

I wish it to be distinctly understood that if you have not got or cannot send us the fiber wanted, you must send nothing else as otherwise I cannot allow this Co to pay for it.
Have them properly packed and notify us full shipping particulars; mark them "Bamboo splints" and do not under any consideration, send them so as to cost as much for transportation as it is possible to charge as you did with our last case CB ①

Yours faithfully

pour la SOCIÉTÉ Indusle et Commle EDISON

Chas Batchelor

1883-07-26

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ELECTRICITÉ

Grand Diplôme d'honneur PARIS 1881 — 501

Ivry-sur-Seine, le 26 July 1883
5, RUE DU PARC.

Mr A. Edison — Newyork.

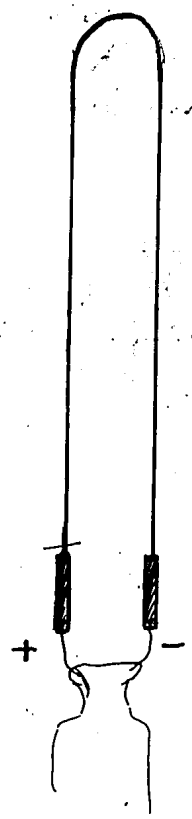
My dear Edison,

One of my men bought a 100 candle Sparrows lamp constructed in Germany and I give you a test of it I have made:
When I got it it tested as follows:-

Resist cold	42 ohms	
" hot	22.9	at 100 candles.
Volts	10.2	" " "
Ampères	4.45	" " "
Kilogrammètres	46.3	" " " x 440 for ft lbs
Lamp par horse p.	1.6	" " "

At the end of 7 hours this lamp was rather black.
At the end of 25 hours it tested:-

Resist cold	44 ohms	
" hot	17.1	at 100 candles.
Volts	115.2	" " "
Ampères	6.73	" " "
Kilogrammètres	79.1	" " "
Lamps per HP.	0.9	" " "



At 32 hours it broke
The length of carbon exact was 7.875 inches
" Diameter averaged .026 of an inch but was $\frac{27}{1000}$ in some places and $\frac{24}{1000}$ in others —

1883-07-26

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ELECTRICITÉ

Grand Diplôme d'honneur

PARIS 1881

Ivry-sur-Seine, le

5, RUE DU PARC.

2

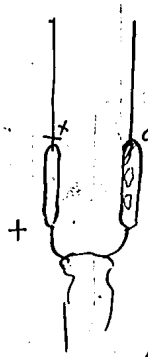
Its section was like this; so much so that I am almost sure it was a bast fibre

Its surface for illumination was ~~.644~~ about or equal to $\frac{6\frac{1}{2}}{1000}$ of a square inch per candle –

It was fastened to the platinum wires by a thick piece of fine plumbago paste baked hard –

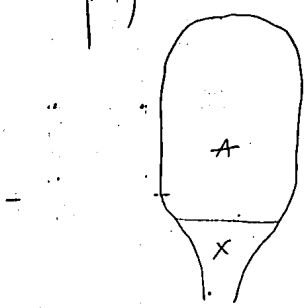
The drawing is exact for length and width also for size of clamps.

It had 10 leading-in wires on each pole each of $\frac{7}{1000}$ diameter



It broke at X on the positive side carbon good in every way besides – the plumbago marked O was considerably torn as if it had been arcing

~~It got~~ very black indeed before it broke in fact I believe the vapor of carbon (as it were) conducted across where it was arcing



After it went the globe was perfectly black in A and not blackened at all at X.

Very truly yours

Chas Batchelor

Upton

Return after perusal

Jensen

1883-07-30

Dyer will you attend to this Insull

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital: 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ÉLECTRICITÉ

Grand Prix Diplôme d'honneur

PARIS 1881

Ivry-sur-Seine, le 30 juillet 188

5, RUE DU PARC.

503

Insull

As you are awaiting Cos. you must be
ankrgement Cos. will be
to give the lie leave for and
will see that they get it.
Have notified the registration in
Germany of patent of June 11 '83
Patents are on second
Patents expiring on change
Patents are in multiple
Dyer

RECEIVED
AUG 11 1883
ANSWERED
.....188...
FILE NO.....

E. A. Edison Esq.
65 Fifth Avenue
New-York

My dear Edison.

"Patents"

On the 9th June last I cabled you as follows:

"Armengaud guarantees nothing if cannot give him two"
"months prepare filing and cable fortnight before"

I wrote Dyer on this subject June 9th and as yet have no answer.

We lost in Germany 58, 59 & 60 through not having sufficient time, though as regards 60, principally from the fact that Hopkinson had done it in England. The "Compagnie Continentale Edison" also wrote to Dyer on these questions, on 11th June, likewise without reply.

62 & 63 (Meters & distribution) are all ready but I assure you we run great risks of losing them in Germany if you cannot comply with my cable of 9th June.

The German contract obliges the Cie Continentale Edison to give them all patents of Edison till 1886 and the loss of the above has caused them to threaten the Cie Cont.le with the consequences, if the same should occur again.

Will you kindly see that they get answers to requests in future as it causes me very much trouble sometimes?

1883-07-30

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ELECTRICITÉ

Grand Diplôme d'honneur

PARIS 1881

Ivry-sur-Seine, le

5, RUE DU PARC.

(cont.)

Case 42. The German office has rejected claims 1, 2 & 5 on the ground that anyone can make these applications; the Cie Cont.le appeals and hopes to get it.

As the German patent office seems to have remarkable ability for cutting out of our applications the best claims and leaving us the material that is worth nothing, I think I shall advise our Compagnie to let the patent business there go into the hands of the German Co who will keep experts to put these patents through & wish even to do so

Very truly yours

Chas Batchelor

Blank No. 3.

No. 107 ya

CABLE MESSAGE.

1883-07-31
206
~~H25~~

THE WESTERN UNION TELEGRAPH COMPANY.

All CABLE MESSAGES received for transmission must be written on the Message Blanks provided by this Company for that purpose, under and subject to the conditions printed thereon, and on the back hereof, which conditions have been agreed to by the sender of the following message.

A. R. BREWER, Secretary. NORVIN GREEN, President.

Check. J Milan

Edison Ny
65 = 5 Ave

Received at 751 BROADWAY
July 31 1883

Is 400 amperes dynamo ready
Colombo

E.

1883-07-31

Explain fully the whole affair

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital 1,600,000 Francs

EXPOSITION INTERNATIONALE D'ÉLECTRICITÉ
Grand Diplôme d'Honneur
PARIS 1881

Ivry-sur-Seine, le 31 July 1883
5, RUE DU PARC.

605

C. A. Edison Esq.
New-York.

Copy of letter sent to-day to Major Eaton

My dear Major

When I was in New-York in the spring of this year I got the estimates for reproducing the working half of the present Central Station with its necessary mains. This, Edison and I agreed, could be done for $ 166,000

This made quite a respectable showing and I understood that these figures should be sent to me in decent shape so that I could give them to our people – I have explained the figures that I brought, but have never received them officially and the failure to send them causes me not a little annoyance sometimes.

If you can send me these figures, or if you can send me the altered figures (if you have altered them) I shall be obliged, as it is very disagreeable to have such things occur as the following :– In talking of an estimate that I had made, M. Porges made me the following remark "Yes! this looks good but then when you came from America you told us that the working part of the Central Station in New York could be reproduced for $ 166,000 & when Mr Meadowcroft came he said it would cost $ 255,000" :– Now as Meadowcroft came direct from you as the Prest of the Company he naturally thinks I have purposely tried

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ELECTRICITÉ

Grand Diplôme d'honneur

PARIS 1881

Ivry-sur-Seine, le

5, RUE DU PARC.

(cont.)

to deceive him.

Please send me these new figures, showing how it is increased to £255,000.

Very truly yours

(Sgd.) Chas. Batchelor

Blank No. 3.

No. 21 NN

1883-08-02

CABLE MESSAGE.

2 15

THE WESTERN UNION TELEGRAPH COMPANY.

All CABLE MESSAGES received for transmission must be written on the Message Blanks provided by this Company for that purpose, under and subject to the conditions printed thereon, and on the back hereof, which conditions have been agreed to by the sender of the following message.

A. R. BREWER, Secretary. NORVIN GREEN, President.

Check. 16 Ivry

Elmwood N.Y.

Edison 65 – 5 Ave

Received at 191 BROADWAY

Aug 2 1883

Send sixteen hundred light also thousand carbons each eight ten sixteen thirty two latest

Batchelor

Cable Ocean When Sketch 100 night Gr ready = send order for carbons to Lamp finding ship to Hamburg or Antwerp or Genoa pay small pays but not to paris.

1883-08-07

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ÉLECTRICITÉ

Grand Diplôme d'honneur

PARIS 1881

Ivry-sur-Seine, le 7th Aug.t 1883

5, RUE DU PARC.

RECEIVED AUG 20 1883

ANSWERED Sept 8 1883

FILE NO.

T. A. Edison Esq.re

65 Fifth Avenue.

New York.

My Dear Edison

New Dynamos. In the ordinary L. machines we have 60 ft lbs of energy (about) on every square inch of cutting surface. My section in the K & the others. This is equivalent calculating from the K. to 230 circular mills of section for every ampere of current passing. As many of my machines run all night I find that this is as much as I dare put through them unless we use a blower.

Your new H., as I learn from a letter from you to E.H.J. gave, for a short time, 400 amperes and, from measurements given, I find that it had only 148 circular mills per ampere so, in order to be safe this ought to be a 320 ampere machine, eh?

The first new machine I made was 120 light; this was a well insulated B armature; made 3 centimetres longer with 8 inch cores 28½ in. long wound with 9 layers of No. 16 wire. At 1250 turns we have 105 volts with 90 amperes on. I can take 150 amperes out of this for a short time but call it for 90 to be perfectly safe for long running.

After these measurements I have made

Our H. gives 400 amperes — Test case with larger armature & wire gets 1450 amperes

1883-08-07

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ELECTRICITÉ

Grand Diplôme d'honneur

PARIS 1881

Ivry-sur-Seine, le

5, RUE DU PARC.

2

2 L machines for ships, which give their 150 lamps with 475 turns, this number being absolutely required by the Austrian navy.

I must have your opinion on the value of Hopkinson's improvements; he is continually at Bailey about them, and Bailey seems as if he desperately wanted to give Hopkinson a royalty or buy what he has got. We have just a letter from him in London in which he says Dr H. has a K which gives 600 lights easy and they want me to go to Manchester to test it. I say the alteration of the length of magnet is not patentable and H. cannot claim anything on it & therefore it is useless to make a contract for a thing that is open to all.

To help to stop their mouths I am making my K with an armature a little larger in diameter which easily allows me to give a machine of 400 amperes that will run day and night & I believe this will equal what he has got.

I understand H. has said he should make a bar armature for this machine and take out 1000 lamps. If he takes them out in the same manner as Sprague's test of his dynamo I would not give much for it in practice at that number.

If you see anything in this that wants correcting tell me so quickly:- I dont feel satisfied with the Berlin model

Hopkinson.

Tell him to say to Bailey that ~~that~~ we will discount H. & pay 10 pc of Gatta on anything he can do - taking up Gatta

1883-08-07

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ELECTRICITÉ

Grand Diplôme d'honneur

PARIS 1881

IVRY-sur-Seine, le

5, RUE DU PARC.

3

because I am afraid that Bailey will make some arrangement with H. if I dont have something always as good.

Lamp tests. Received 923. 926. 938. 941. & 955; these are magnificent. We are now making long carbonization & will send you tests. You must remember that our fibres as yet are only 6" long

Arc light. I have received your bill for 6 arc lights complete with globes and carbons : value $113.20. What is this? Is it the Dr's arc light? because, if so, it was understood between Navarro & myself that he would send these 6 as experimental ones and I did not expect to pay anything for them.

Yours faithfully

Chas Batchelor

Insuc = Explain the whole P & Co about arc lights

1883-08-10

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ÉLECTRICITÉ
Grand Diplôme d'honneur 5114
PARIS 1881

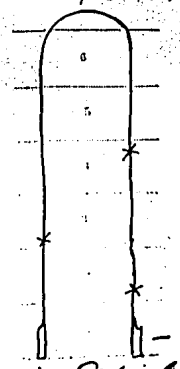
Upton

Ivry-sur-Seine, le
5, RUE DU PARC.
Aug 10th 1883.

J. A. Edison Esq
65 5th avenue.

Lamps made by Friedrichs & Greiner, Thuringen, Germany. } the carbons said to be made of Sar treated with acids etc ----

Form almost same as Edison —
6 lamps received marked 99 volts & said to be 16 candle.
At 16 c.p. these tested as follows:—



	1	2	3	4	5	6
Resistance Cold	305	280	305	310	300	290
" Hot	158	142	154	157	154	157
Volts	104	105.3	105.2	107.8	105.5	107
Ampères	.65	.74	.68	.71	.68	.68
Kilogrammetre	6.9	7.9	7.3	7.8	7.3	7.4
Lamps per H.P.	10.8	9.5	10.2	9.6	10.2	10.1

+ At 64 candles 1, 3, & 4 broke immediately, so tried other 3 at 16 candles

No 2	lasted	hrs 7.32 min	
" 5	"	109.20	
" 6	"	298.09	
		3) 414.61	
		hrs 138.20	average life

Before breaking all were rather badly discolored on the glass

1883-08-10

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ELECTRICITÉ

Grand Diplôme d'Honneur PARIS 1881

Ivry-sur-Seine, le

5, RUE DU PARC.

2.

Size of Carbon after Carbonization :—
4·428 inch × ·0045 × ·008
Illuminating surface ·1107 square inch
" " per candle ·00692 sq in.
Leading in wires ·012 diameter
Section of carbon

Clamps made of carbon evidently put on in a soft mixture & baked on

Yours very truly
Chas Batchelor

This is a very poor record for the Germans. Perhaps Batch. has weakened on the virtue of this particular form of carbon.

JRU

1883-08-10

not come.

SOCIÉTÉ ÉLECTRIQUE EDISON
SOCIÉTÉ ANONYME
Au Capital de 1 million de francs

EXPOSITION INTERNATIONALE D'ÉLECTRICITÉ
Paris 1881
GRAND DIPLOME D'HONNEUR

Adresse Télégraphique :
EDISON - PARIS

Paris, le 10 Aug. 1883

Don't believe in [illegible]

Paris midnight 10-3

FILE

My dear Mr Edison,

I have sent Major Eaton a long letter and a skeleton of plan for an International Society yesterday from London. During the next two weeks I remain here for Mr Raw to take his vacation, and to get up a complete plan for the International Company. You will see a letter sent to Major Eaton two days ago about the Central Station balance sheet, Will you not help to get that sent here, and also official figures as to present cost of mounting central stations. You will see in letter to Major Eaton the reasons, and I assure you that any balance sheet whatever, even one showing a loss, is better than silence.

The balance sheet should be accompanied with an exact statement of the number of dynamos in operation at different periods, and of all those circumstances that you know and of which others know nothing that have embarrassed the development of the 1st station.

Such a statement as this will command confidence. As it is we are met on all sides by statements that the station is a failure, and people receive with incredulity all that we can say. e.g. I receive the following in a letter from the Vice President of our German Co this morning. "The unfavorable financial results of the Central Station at New York are certainly known to an initiated circle." — Every day that passes without a complete official statement is an added prejudice to our common interests.

FILE

Johnson says that our terms dwindle in negotiation. It is my business to ask terms in the first place that are agreeable to you and to the Paris Companies. If I had begun on the low key they and you would have said with reason that the business was sacrificed through lack of confidence and assurance in making terms. So I have contested the terms on a descending scale till everybody here is convinced that the high terms started with are impracticable and every one is fully agreed on a basis that is possible. No one can change or struggle against the circumstances that impose these conditions and you have practically no choice as to accepting them. I speak with confidence after several months passed in discussing the matter in almost every country on the Continent.

I find that financial men are entirely sound when they reply to the brilliant prospects held out to them; "Very well, if your affair is so good, you cannot desire better than to participate in the profits."

And in fact take the case of a company organized with 1,000,000 f. Capital. If you receive 15% of the Capital you have 150,000 f. Suppose the dividend to be 10%, you receive 15,000 f. revenue. With the same profit the shares receiving 6% preference you would receive 20,000 f., if 20% profit you would receive 30,000 f. only, while on the participation in profits you would receive 70,000 f. Even if you give 8% preference you get 60,000 f. —— It may be answered that you get this amount (the 15%) at once and certainly while the other is deferred, and dependent on administration. This is true, but the Capitalist has the answer that this is an unfair odds against him and the public who risk

their money, and I assure you they will have the last word.

Where there is a preference dividend to the capital and a division of profits afterwards between the share holders and the promoters and vendors the guarantee for the latter is a very good one.

I think £ 50,000 can be obtained without difficulty from a Company organized with a first emission of 30,000,000 to 50,000,000 fr. and if a preference dividend of 8% is conceded, a royalty of four or five cents per lamp.

You can figure better than I can the number of lamps consumed yearly in an exploitation employing a capital of 50,000,000 fr. Supposing it to be 1,000,000 a royalty of 5 cents would give you in advance of the dividend to the shareholders a sum equal to the one per centum of preference dividend.

If the business is a good one I think the terms now proposed for an International Company are better than those we have heretofore tried to get.

It is unfortunate that it was necessary to make the arrangement with Swan in England before the Continental affair is made up. Union with Swan will probably be imposed on us by the fact of the union in England, and the first terms having been made where he is strongest it will have an unfavorable effect for us.

Referring again to the proposed International Company the creation of such a Company will assure a virtual monopoly for the Continent, and will prevent the business being cut up by infringers and competitors.

There is a great difference as to conditions in such an affair in England, the United States and here.

In England and the United States the first impulse of every man when you say 'monopoly' is to pick up a stone to throw at it, but it is very different on the Continent. The formation of such a Company as that proposed would prevent the putting of capital into any rival affair.

An additional reason for such a company is that I am now fully satisfied that in Spain, Austria and Russia no considerable capital can be obtained, and if it could be obtained the results to us would be absolutely nil. They are not accustomed to the administration of such affairs and besides by one means or another we should be cheated out of our part. With a strong International Company those countries will give the largest returns on the capital employed

Also with such a Company, Holland, Switzerland, Greece, Turkey and Roumania will be held just as firmly as the countries where there are patents, and the same remarks apply as above to Spain, Russia and Austria.

The fields of exploitation in which the vendors participate in profits is thus enlarged, and a profitable exploitation is assured in countries where otherwise no good result is to be hoped for.

It has been impossible for me to present to you these considerations before, because they have only become apparent from the study and reflection of the last months

Everyone here is agreed on the above points, and it is only a question whether the Company will

1883-08-10

have its principal seat in Paris or London. Mr Leon is working in Paris for the former, while I work for London, to see from which we can get out the best results. The ideas and the terms of negotiation are the same.

Hoping that they will commend themselves to your judgement,

I am, very respectfully & truly yours

F. W. Bailey

Thomas A. Edison Esq
President.

1883-08-20

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme. Capital : 1,500,000 Francs

EXPOSITION INTERNATIONALE D'ELECTRICITÉ

Grand Diplôme d'honneur

PARIS 1881

521

Ivry-sur-Seine, le 5, RUE DU PARC

Aug 20th 1883

Thos. A. Edison Esq

New York

My dear Edison,

I think the time is not far distant when I shall be able to get away. I am just about to put a director in at the fabrique so that I can leave it a little for more important work. Bailey and Lewis new company is coming along well and I think will soon be closed. It will give a better result to the European and make its stock a saleable article – It will have plenty of money to make any installation it likes – It will not be controlled by Borges who I must say is the most disagreable man I ever met; he will do nothing himself unless he gets another grip on us, and he holds out continual threats of closing up the companies etc, etc.

Lamps. You must I see get any trade from here by offering at low prices so I would immediately send them such prices – I am certain that in Germany and France lamps can be made much cheaper than your prices and I will do all I can to stop the making of fabriques at present – Make your prices for 10,000 – 25,000, and 50,000 assorted – at a time

They may want me to take a position in this new company to help in organization of its work, but if it meets your views I shall take none so that I can skip immediately I see the chance

Yours as ever

Chas Batchelor

Chas Batchelor
Aug 20 1883
4
re the new Co

1883-08-22.

COMITATO

PER LE APPLICAZIONI DELL' ELETTRICITÀ

« SISTEMA EDISON » IN ITALIA

Via Manzoni, 12 A

Indirizzo per Telegrammi
EDISON - MILANO

MILANO, 22 Août 188

Stock de Naples

	Votre facture	Notre Inventaire	Différence en moins
Dynamos Z	2	2	—
Régulateurs	2	2	—
Lampes A	2240	2200	40
" B	1000	1000	—
Douilles à clé	180	160	20
Coupe-circuits	70	60	10
Connections en plomb	350	300	50
Petits isolateurs	350	300	50
Grands "	100	100	—
Poinçons	50	40	10
Pélards	48	43	5
Kilos fils assortis	1059	1059	—

1888-08-23

Blank No. 3.

No. 276 | CABLE MESSAGE. | 276

THE WESTERN UNION TELEGRAPH COMPANY.

All CABLE MESSAGES received for transmission must be written on the Message Blanks provided by this Company for that purpose, under and subject to the conditions printed thereon, and on the back hereof, which conditions have been agreed to by the sender of the following message.

A. R. BREWER, Secretary. NORVIN GREEN, President.

Check. Berlin

Received at 852 BROADWAY Aug. 23 1888

Edison. ny

65 figures are my

Cable opinion Capacity

A Machine haste

Edison

We are running fourteen at Louisville

four hundred amperes;

1883-08-28

Cie CONTINENTALE EDISON
SOCIÉTÉ ANONYME
Au Capital de 1 million de francs

EXPOSITION INTERNATIONALE D'ÉLECTRICITÉ
Paris 1881
GRAND DIPLOME D'HONNEUR

ADRESSE TÉLÉGRAPHIQUE
EDISON, PARIS

Paris, le 28 August 1883

Refer to Dyer for full answer

Thomas A. Edison, Esqr.
New York.

Dear Sir,

We beg to confirm our respects of yesterday & wish herewith to state that we have never received an answer to our various letters stated hereafter & addressed to major Dyer.

1° Letter 9th June of Mr Batebelor
2° our letter 11th June asking kindly to send us original patents
France Set 12 R.R. cases
Belgium " 9
German " 2
Which had been forwarded to Serell.
3° Our letter 29 June various matters.
4° our letter 2nd July sending you lists of patents of Thompson, Swan, Maxim etc. & form for receiving patents in Italy.
5° our letter 23 July 1883 on issue of Austrian patents.

We are waiting for a reply to this last letter before we have our austrian patents following set 32 issued.

We would be much obliged if you

Would call the attention of Major Dyer to the fact that his not answering letters on patent matters may prove very detrimental. & We would be much obliged if you would see that hereafter we get regularly a reply to our letters.

Yours sincerely

COMPAGNIE CONTINENTALE EDISON

Administrateur Délégué

Compagnie continentale

Mr Dyer

Re Mr Dyer not answering letters

August 27 '78

X 57

1883-08-29

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ÉLECTRICITÉ

Grand Diplôme d'honneur 525
PARIS 1881

Ivry-sur-Seine, le
5, RUE DU PARC.
Aug 29 1883

Samuel Insull Esq New York.

My dear Insull,

Arrent Stock. Is there any possibility of you arranging for the payment of the sum mentioned in the enclosed letter from the Edison E. L. Co namely $3.810?— As I know Edison cannot be flush it would be better to sell something to pay it would it not?

Fac-Simile Patents. I have instructed Brandon (who took these patents) to pay the annuities for France and Belgium. This will be done immediately and in a few days I will send you the receipts. This I have done in accordance with your letter of Aug 14th enclosing Serrell's letter of Aug 10th. 1883.

Prices of fibres. You people are getting me into a deal of a snarl over these prices and if you knew the difficulty of explaining away a change in price with a Frenchmen and how it has to be investigated you would not do it

The 21 July I sent you an order for 15,000 fibres
The 3 Aug I sent another order of 10,000 fibres
These were sent because Upton had given me the prices in a letter (of which he has a copy) dated May 14 1883. These prices I asked him

1883-08-29

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ÉLECTRICITÉ

Grand Diplôme d'honneur PARIS 1881

2

Ivry-sur-Seine, le

5, RUE DU PARC.

for when Edison and I were at the lamp factory and when he gave them me it was understood that the lamp factory could make plenty of money at those prices — these prices were for any fibre

$5 per 100
$40 per 1000
$300 per 10.000

Now after having ordered 25.000 a letter coming from Upton at Lamp Co says that he shall charge: —

	fibres	Carbons
B	2½ cts each.	3½ cts each
A	4 " "	5½ " "
32 c.p.	5 " "	6½ " "
50 c.p.	5½ " "	7½ " "
100 c.p.	6½ " "	9 " "
10 c.p.	5 " "	7 " "

entirely ignoring that in a previous letter he gave me a price of 3cts each all round for fibres if I ordered 10.000 at a time —

This probably could have been got over but later the Société Industrielle received a letter from Edison in which the prices are again raised as follows: —

	fibres	carbons
B	2½ ¢	5 ¢
A	4 ¢	7½ ¢
32	7 ¢	12 ¢
50 c.p.	10 ¢	
100 c.p.	12 ¢	
10 c.p.	—	—

I agree with Batchelor, I had long (1883) argument with Upton about the prices. He changeable way. He was almost cute that one has this reaching as you see in some cases actually 4 times the price originally given by Upton.

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme — Capital 500 000 Francs

EXPOSITION INTERNATIONALE D'ÉLECTRICITÉ

Grand Diplôme d'Honneur

PARIS 1881

Ivry-sur-Seine, le

5, Rue du Parc

The total cost of a fibre to us here after all inspection is made and all bad thrown away is 2¾ cts and the total cost of a carbon after its resistance is determined and all bad thrown away is 3¾ cts these prices allow for all depreciations & expenses of whatever kind that can happen such as losing an entire carbonisation occasionally, depreciation of furnace, etc. etc. etc.

I must here remark that to charge 12 cts for a 32 c.p. carbon is an outrage — It is exceedingly difficult to get anyone here to consent to sending an order to America for anything; and invariably when they are persuaded to do so they have difficulty with badly packed material, broken pieces, and now enormously higher prices than those represented to them — Why did Upton give me those prices of May 14th if he did not intend to stand by them for at least the first orders — If it is necessary you must stand by one for the orders already given as you see such differences cannot be satisfactorily explained

Very truly yours

Chas Batchelor

Upton better get that 1 fibre could be changed at 3 dollars [illegible]

1883-08-29

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ÉLECTRICITÉ

Grand Diplôme d'honneur

PARIS 1881

Ivry-sur-Seine, le 29th Aug.t 1883.

5, RUE DU PARC.

T. A. Edison Esq.re

New-York.

Dear Sir,

We duly received your letter of 17.th inst. contents of which are noted.

As regards the prices given therein for unpacked fibres, we are astonished to find your charge so high for these; we have not yet received the bill for those ordered by us on 21st ult.o & 3rd inst. but we fully expect that the prices given are only for future orders and that this lot will be billed anyhow not higher than the highest price given to Mr Batchelor when in America viz.

$5	for	100.
$40	"	1000
$300	"	10,000

The above mentioned orders were given under the impression that these prices were correct.

Your prices for carbons unpacked is exceedingly high; it does not cost us here more than a quarter of said prices to make them.

Yours faithfully.

SOCIÉTÉ Industrielle et Commerciale EDISON

R. V. Picou

1883-08-30

SOCIÉTÉ ÉLECTRIQUE EDISON
SOCIÉTÉ ANONYME
Au Capital de 1 million de francs

EXPOSITION INTERNATIONALE D'ÉLECTRICITÉ
Paris 1881
GRAND DIPLÔME D'HONNEUR

ADRESSE TÉLÉGRAPHIQUE
EDISON, PARIS

RECEIVED
SEP 18 1883
ANSWERED

FILE No. 151

Paris, le Aug 30th 1883.

33, Avenue de l'Opéra

Mr. Thos. A. Edison
New York.

Dear Sir,

We beg to acknowledge receipt of your favor of Aug. 17th enclosing a copy of a letter addressed on July 26th by Mr. Paul Schmitt fils of St. Dié to Mr. W. M. A. Anderson of the Board of Fire Underwriters of New York, concerning the buying of Edison lamps to be imported in France. Mr. P. Schmitt is one of our customers and we should take measures, so that he cannot use any other lamps but those sold by us. We thank you very sincerely for the information you have given us and we shall be very thankful if you will always inform us of any attempt made to import American lamps in Europe that may come to your notice.

We are, Dear Sir,

Yours very truly.

SOCIÉTÉ ÉLECTRIQUE EDISON

J. B. Bais

ADMINISTRATEUR DÉLÉGUÉ

1883-08-30

Reply to, Bergman & Co

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ELECTRICITÉ

Grand Diplôme d'honneur PARIS 1881

529.

Ivry-sur-Seine, le 5, RUE DU PARC

Aug 30th 1883.

Thos A Edison Esq

New York.

Theatre Regulators

My dear Edison,

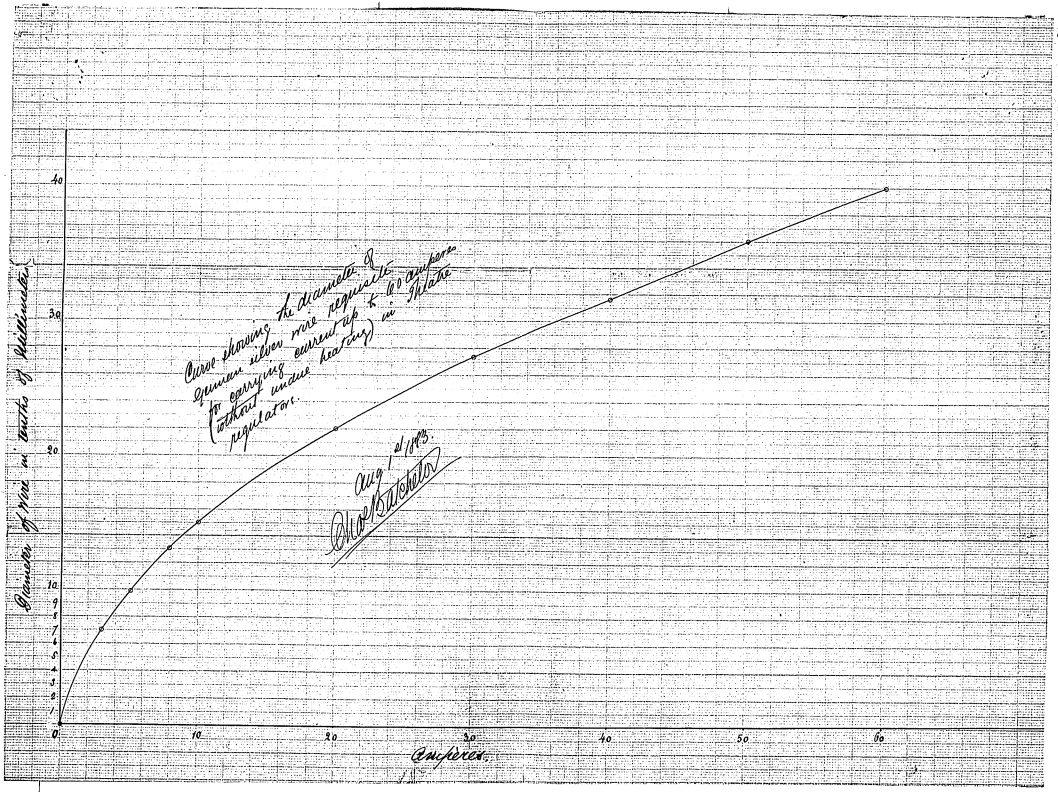
I have made one or two good theatre regulators of spirals of German silver wire, and if Bergman & Co like to use them I enclose a table for calculating the resistances; and a curve, which if followed, you will see no jumps in the light from 16 candles to a black.

The table shows 40 buttons on the switch, the amount of resistance to introduce at each time, the total resistance etc. etc. — It is made for one Edison lamp ·78 ampere of 140 ohms and any number of lamps in a lot can have a resistance calculated from this as follows:- In order to know the diameter of your wire you must know how many amperes you want to carry on each button of the resistance box, so you multiply the second column by the number of lamps ~~it is for~~ the resistance box is for; and the curve will give you the diameter of wire in tenths of millimetes — The resistance of this wire is found by dividing the sixth column by the number of lamps in your regulator

Yours Chas Batchelor

2 Enclosures

[ATTACHMENT]



Curve showing the diameter of German silver wire requisite for carrying current up to 60 amperes (without undue heating) in Theatre regulators.

Aug 1st 1883.

Chas Batchelor

1. Buttons on Resistance Box.	2 Amperes	3 Total resistance in Ohm	4 Resistance of Lamp	5 Resistance Introduced	6 Resistance of Buttons of Box.
1	0.5864	140	140	0	0
2	0.7688	143.05	141.8	1.25	1.25
3	0.7512	146.43	143.6	2.83	1.58
4	0.7336	149.94	145.4	4.54	1.71
5	0.7160	153.63	147.2	6.43	1.89
6	0.6984	157.50	149.0	8.50	2.07
7	0.6808	161.57	150.8	10.77	2.27
8	0.6632	165.86	152.6	13.26	2.49
9	0.6456	170.38	154.4	15.98	2.72
10	0.6280	175.16	156.2	18.96	2.98
11	0.6104	180.21	158.0	22.21	3.25
12	0.5928	185.56	159.8	25.76	3.55
13	0.5752	191.24	161.6	29.64	3.88
14	0.5576	197.25	163.4	33.85	4.23
15	0.5400	203.70	165.2	38.50	4.63
16	0.5224	210.57	167.0	43.57	5.07
17	0.5048	217.91	168.8	49.11	5.54
18	0.4872	225.75	170.6	55.15	6.04
19	0.4696	234.24	172.4	61.84	6.65
20	0.4520	243.36	174.2	69.16	7.32
21	0.4344	253.22	176.0	77.22	8.06
22	0.4168	263.91	177.8	86.11	8.89
23	0.3992	275.55	179.6	95.95	9.84
24	0.3816	288.26	181.4	106.86	10.91
25	0.3640	302.19	183.2	118.99	12.13
26	0.3464	317.55	185.0	132.55	13.56
27	0.3288	334.55	186.8	147.75	15.20
28	0.3112	353.47	188.6	164.87	17.12
29	0.2936	374.65	190.4	184.25	19.39
30	0.2760	398.55	192.2	206.35	22.09
31	0.2584	425.69	194.0	231.69	25.34
32	0.2408	456.81	195.8	261.01	29.32
33	0.2232	493.53	197.6	295.93	34.22
34	0.2056	535.02	199.4	335.03	40.39
35	0.1880	585.11	201.2	383.91	48.89
36	0.1704	645.54	203.0	442.54	58.63
37	0.1528	719.59	204.8	515.09	72.55
38	0.1352	813.61	206.6	607.01	91.92
39	0.1176	932.37	208.4	725.97	119.96
40	0.100	1100.	210.	890.00	163.03

Be careful not to mistake the 5 for 9.
The Frichelmann makes a 5 so 5 — C.B.

Copy to Fuller

[ATTACHMENT]

1883-09-03

Vienna 3 Sept. 1883.

CHAS. DITCHELLOR

OK

Messrs the Compagnie Cont.le Edison
Paris.

Gentlemen,

We duly received your favor of the 1st inst. and confirming our other letter in French enclosed herewith we beg to say that when convenient we generally prefer to correspond in English being better familiar with that language.

We are of opinion that from a legal point of view there is nothing to prevent your your publishing here the warning you have published in France.

Should you decide to take steps against infringements in Austria the proceedings would have to be taken with the aid of a lawyer here.

The Austro United Electric Light company limited of London has applied to the ministry of commerce here to have the Edison patents for incandescent lamps cancelled.

29 May 1880 – 9 January 1881
25 July 1880 – 1 November 1881
13 August 1880 – 21 December 1881

I have had an account of the [illegible] identity with the English patent granted to Lady Mary Fox. [illegible] 1879 – 20 March 1879 – 12 Oct. 1879, 28 August 1880 and [illegible] 1880 and answers will have to be filed shortly.

Yours truly

Forgot to change

How is this for high?
CM.

1883-09-04

COMITATO
PER LE APPLICAZIONI DELL' ELETTRICITÀ
« SISTEMA EDISON » IN ITALIA

Via Manzoni, 12 A

Indirizzo per Telegrammi
EDISON-MILANO

MILANO 4th Sept 1883

Th. A. Edison Esq
New York

Dear Sir

We beg to confirm our telegram of to-day:
"Ship breaker uprights for C dynamo, cable when can deliver other C dynamo"
The breaker and uprights are destined for the C dynamo supplied to us by the Compagnie Continentale from their depot of Antwerp.
This dynamo must be erected within the month of October, and we hope you will be able to ship breaker and uprights soon enough to be used and set up at the same date. Shipping them on board a steamer sailing directly from N York to Genoa will save at least 15 days.
It is extremely probable that we may find convenient to add a sixth dynamo to our Central Station. Therefore we ask you by cable when you will be able to ship a C dynamo (with corresponding breaker and uprights). If you can deliver the

machine in good time and the price will be found convenient, we will most probably cable you the order within a week or two. We hope you will ship, according to your cable, the 400 ampere machine on the 7th inst. We shall be obliged to supply us by return of post all the data concerning this machine, viz. speed, resistance, etc. After having experimented it, and found good, it is probable that we may order another. You will please at the same time to give us some information about the 90 Ampere machine, because we want to order some. And in general any information you may give us about all the new types of machines and other apparatus made or used after our M. Colombo's visit to N York, will be of great use for us. M. Batchelor informed us about a new meter and also about a recording Ampeiometre or indicator of the number of lamps worked by the station, but we know nothing about their results, practical applicability, price etc and should be glad to have more detailed information

In our Station we have adopted as standard lamps the A lamp of 102 Volts (for no other reason that the majority of our stock was of such lamps). Please to ship directly to Genoa 2000 (two thousand) A lamps of 102 Volts, carefully packed, in order to avoid the extraordinary breakage of the 100 candle lamps, of which 13 were broken in five dozens.

Our Station is working well, although progressing slowly, because of the time required by the wiring of the installation. We have obtained the order to light the Theatre della Scala (2450 lamps A and B) and with this and other installations the affair seems to take a satisfactory turn.

Awaiting your earliest reply, we remain, dear Sir

COMITATO PER LE APPLICAZIONI DELL' ELETTRICITA'
SISTEMA EDISON, IN ITALIA

G Colombo

1883-09-08

KESSLER & Co
P.O. BOX 1105.

68 Wall Street
New York, Sept. 8th 1883

T. A. Edison Esq
65 Fifth Ave.

Dear Sir,
The Banque Centrale du Commerce, Paris, has telegraphed us to pay you $2.000. for account "Ivry". Enclosed we hand you our check for that amount, please sign & return enclosed receipts
& oblige, Yours very truly,
Kessler & Co

34

Sept 8th 83

Kessler & Co.

Encloses check for $2.000

1883-09-11

Have with the originals —

RECEIVED
SEP 20 1883
ANSWERED

Mr. Dyer,

Mr. Edison has requested me to refer the attached letter, from the Compagnie Continentale Edison, to you for reply, embracing all the points contained therein. Please return.

FILE No.

S. Insull,

per G!

Sept. 11th. 1883.

We have sent the Belgian Co. a copy of our reply, & have asked them to send us a copy of the letter they received from you.
Yours truly
Geo. L. Dyer

[ATTACHMENT]

1883-09-10

Cie CONTINENTALE EDISON
SOCIÉTÉ ANONYME
Au Capital de 1 million de francs

EXPOSITION INTERNATIONALE D'ÉLECTRICITÉ
Paris 1881
GRAND DIPLOME D'HONNEUR

ADRESSE TÉLÉGRAPHIQUE
EDISON, PARIS

Paris, le 10th September 1883

33, Avenue de l'Opéra

Dyer please thresh this out
E

Thomas Alva Edison Esqre
65 Fifth Avenue
New York. U.S.

Dear Sir,

We wrote last on the 29th Ult.

Russia Set 2. (corresponds to Continental Set 2.)

We have patents in Russia for our foundation patents Sets. 1, 3, 4, & 5.

All Continental sets after Continental set 6 (refused by the Russian office as not being subject for a patent) have not been patented there as patents in that country are only granted for a very short time & are very expensive.

Continental set 2 was filed on the 22nd June 1879 & is still pending before the Russian patent office.

We are now informed that the Russian Government will not grant this set as one patent, but wishes it divided in 6 patents.

Enclosed copy of the reasons of the

[ATTACHMENT]

1883-09-10

Cie CONTINENTALE EDISON
SOCIÉTÉ ANONYME
Au Capital de 1 million de francs

EXPOSITION INTERNATIONALE D'ÉLECTRICITÉ
Paris 1881
GRAND DIPLOME D'HONNEUR

ADRESSE TÉLÉGRAPHIQUE
EDISON, PARIS

Paris, le 10 Sept 1883

33, Avenue de l'Opéra

(2) (Suite)

Russian office for refusing a single patent for that set.

We have studied the matter & also referred to Mr Batchelar to know which part of this set according to his opinion we should patent in Russia, but Mr Batchelar wishes us first to refer to you, to have your advice on the subject, which is of a certain importance as this is one of the first sets deposited in Russia.

Out of the 6 parts of the set, we would select the most important to be patented in Russia as set N°2. & would ask you if you will give us your advice which of these parts you consider most important.

& give us a reply kindly without delay as we must give our patent agent definite instructions towards the 10th of next month as last delay.

Thanking you before hand for your trouble.

Yours sincerely.

COMPAGNIE CONTINENTALE EDISON

Administ. Délégué

1883-09-11

SOCIÉTÉ INDUS^elle & COMM^le EDISON

Société Anonyme, Capital : 1.500.000 Francs.

à Ivry s/Seine, 5, Rue du Parc.

Grand Diplôme d'honneur PARIS 1881

5744 Ivry, le Sept 11 1883 188

Mr. A. Edison, Esq

New York.

My dear Edison

Your cables for £200 were responded to Saturday - Please send forward the bills for same immediately - The factory says that all they have ordered & the balance to your credit here does not ~~amount to that amount although~~ I have prevailed on them to send it Please in future dont ask for more than is due as I have trouble enough getting it promptly as I have to - You know put the factory into the hands of another director

Yours truly

Charbatchelor

1883-09-12

Mr. Edison:

Here is an application from Portugal: this country does not belong to the European Company, according to the contract. Will you please take charge of this matter.

W. H. Meadowcroft

Secy

Sept 12/83

1883-09-12

Hotel de Belle Vue, Brussels,
12th Sept. 1883

I will want for the document the mentions before answering

My dear Mr Edison,

Have Halls letter for answer

I sent to Eaton by last Saturday's mail a long letter resuming the situation of affairs on the Continent and by this mail send a complete printed memorandum of the plan of formation of the International Company and several other papers that will be of interest to you.

You will notice under the head of "Payments for patents" on the first page, that I have struck out the clause, "taken or to take during five years, and the preference after that period for all improvements."

The gentleman with whom I discussed this point latterly in London wanted an absolute engagement of all your future inventions relating to Electric Light and motive power; but I replied that we brought to the Company a complete and workable system; that you had disposed of already a considerable part of your interest in the profits of the business, and that we could not throw in your future work into the bargain. He recognized the force of the suggestion and I agreed to write to you to get your ideas assuring him

1883-09-12

that you would agree to such an arrangement as would secure the Company on reasonable terms against the possibility of finding you in competition with us.

I was told in London that the English Company gives you double the sum expended in experiments and in the taking of patents, for all new patents that it desires to profit from, and I would like to know if an arrangement in similar terms would satisfy you for the Continent.

I do not like the form in which the matter stands in the Contract with the "Compagnie Continentale" and I do not think it would be acceptable to the persons we are now treating with.

You may consider the constitution of the International Company with a capital of thirty millions of Francs during the month of October as an assured fact.

I have agreed here with the Belgian bankers for their participation to the full amount offered them of three millions of francs, and have received a letter this morning from Amsterdam expressing the approval of parties there of the proposed affair.

I go from here to Amsterdam tomorrow

I shall want to be tied up after the 4 yrs - but will give them [illegible] a good [illegible] if they [illegible] with us.

1883-09-12

3

from there to Francfort and to Berlin and afterwards to Vienna. I think the affair will be wholly made up and ready for drawing on definite papers in the first days of October.

If you approve of the idea concerning new patents, of taking the same terms as those ~~employed~~ stipulated in your English Contract please cable "Heraclite Paris", "accept English conditions", and in all events I beg that you will reply without delay, giving your opinion on the matter.

I am, Dear Sir

Very sincerely Yours

J. A. Bailey.

[TRANSLATION FOLLOWS]

1883-09-13

J. No. 476.

DEUTSCHE EDISON GESELLSCHAFT

FÜR ANGEWANDTE ELEKTRICITÄT.

INTERNATIONALE ELEKTRISCHE AUSSTELLUNG
GROSSES EHREN-DIPLOM
Paris 1881.

TELEGRAMM-ADRESSE:
Edison Berlin.

Reichsbank Giro-Conto.

BERLIN W.
96 Leipziger Strasse.

13. September. 1883.

Insulcan answered

Herrn T.A.Edison.

New-York.

Wir sind im Besitz Ihrer geschätzten Depesche lautend:

four hundred dollars each ~~tub~~ antwerp or hamburg
payment newyork against delivery documents
commence shipping thirty days-edison.

und nehmen von dem Inhalt bestens Vermerk.

Wir erlauben uns hierdurch nochmals auf diese Angelegenheit zurück zu kommen und Ihnen ergebenst zu bemerken, dass wir, wie Ihnen ja aus unseren Statuten bekannt ist, auf Grund der uns von Ihnen gesandten Modellmaschinen den Herren Siemens & Halske hier unsere Aufträge geben und denselben einen um 5% höheren Preis bezahlen müssen, als Sie uns berechnen.

Es liegt uns nun natürlich daran, neben unseren sehr guten Maschinen auch durch billige Preise concurrenzfähig

zu

[TRANSLATION FOLLOWS]

1883-09-13

4216

DEUTSCHE EDISON GESELLSCHAFT
FÜR ANGEWANDTE ELEKTRICITÄT.

zu sein und der Beleuchtung hier in Deutschland einen schnellen und grossen Eingang zu verschaffen.

Wir haben den Herren Siemens & Halske 40. Maschinen dieser beiden Typen in Auftrag gegeben und würden Sie ergebenst um die Freundlichkeit bitten, uns den äussersten Preis anzugeben, zu dem Sie eventl. in der Lage wären, die Maschinen bei einer grossen Ordre uns franco New-York zu liefern.

Wir dürfen Sie wohl ersuchen, die Preise recht scharf zu calculiren, da es in Deutschland wesentlich darauf ankommt, neben sehr guter Qualität der Maschine auch möglichst billige Preise zu stellen.

Wir dürfen Sie wohl bitten uns den Preis prompt zu telegraphiren und begrüssen Sie

mit besonderer Hochachtung

ergebenst

DEUTSCHE EDISON GESELLSCHAFT
FÜR ANGEWANDTE ELEKTRICITÄT.

Copirt

[TRANSLATION]

1883-09-13

13. Sept. 1883.

T. A. Edison, Esq.

We have got your telegramme:
four hundred dollars each f.o.b. Antwerp.
or Hamburg payment New-York against
delivery documents, commence shipping
thirty days - Edison.
and we take notice of its contents.
Allow us to speak again of this affair
and to remind you - as you know from
our statutes - that we must give our
orders for machines - of which you
give us the patterns - to Mess. Siemens
& Halske and that we ~~must pay them~~
are obliged to pay them a price that
is 5 pr cent dearer than yours.
Of course we would like to compete as
well by very good machines as by cheap
prices, and to get electric lighting
used in Germany as much & as soon
as possible.
We have ordered Mess. Siemens & Halske
40 machines of both these patterns
and beg you to be kind enough to
give us your lowest price that ~~we~~ you
would make us if we would give
you a large order to deliver in New York

[TRANSLATION]

1883-09-13

We beg you to make the calculation as low as possible because in Germany beside a good quality prices as low as possible are wanted

We beg you to telegrapts us the price immediatly and remain

yours very respectfully

Deutsche Edison-Gesellschaft

Dyn.

Blank No. 3.

1883-09-17.

No. 312 | **CABLE MESSAGE.** | 155

THE WESTERN UNION TELEGRAPH COMPANY.

All CABLE MESSAGES received for transmission must be written on the Message Blanks provided by this Company for that purpose, under and subject to the conditions printed thereon, and on the back hereof, which conditions have been agreed to by the sender of the following message.

A. R. BREWER, Secretary. NORVIN GREEN, President.

Cok

Check. J Ivry

Received at 852 BROADWAY

Sept 17 188

Knoxville My

Thos A Edison

65 = 5 nasy

Send drawings twenty five

fifty dynamos

Dulsdum is of fighting in ok

drawings 50 Sept

RECEIVED SP 17 1883

ANSWERED

188

FILE No.

To guard against mistakes on the lines of this Company, the sender of every message should order it repeated; that is, telegraphed back from the terminus of said lines to the Originating Office. For such repeating, the sender will be charged in addition, one half the usual tolls of this Company, on that portion of its lines over which such message passes.

This Company will not assume any responsibility in respect to any Message beyond the terminus of its own lines; and it is agreed between the sender of the following Message and this Company, that said Company shall not be liable for mistakes or delays in transmission or delivery, or for non-delivery to the next connecting Telegraph Company, of any unrepeated message, beyond the amount of that portion of the charge which may or shall accrue to this Company out of the amount received from the sender for this, and the other companies, by whose lines such message may pass to reach its destination; and that this Company shall not be liable for mistakes in the transmission or delivery, or for non-delivery to the next connecting Telegraph Company, of any repeated message, beyond fifty times the extra sum received by this Company from the sender for repeating such message over its own lines; and that this Company shall not be liable in any case for delays arising from interruptions in the workings of its lines, nor for errors in cipher or obscure messages. And this Company is hereby made the agent of the sender, without liability, to forward any message over the lines of any other company to reach its destination.

This Company is not to be liable for damages in any case, where the claim is not presented in writing, within thirty days after the sending of the message.

32

Sept 17/93

To Thos. A. Edison
Telegraph Edison

Will Wants drawings
Fr 25 Fr Englishtown
Lines

1883-09-19

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

564

Société Anonyme Capital 1.400.000 Francs

EXPOSITION INTERNATIONALE D'ÉLECTRICITÉ

Grand Diplôme d'honneur

PARIS 1881

Ivry-sur-Seine, le

5, RUE DU PARC.

Sept 19th 1883.

Mr. A. Edison Esq

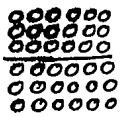
65 5th Avenue -
New York

Rec'd & Dynamos relating to Soldan

My dear Edison,

Cable on fibre prices received & handed to 'Societe Industrielle' - Also received cable as follows:- "mail immediately proxy vote special meeting light Co 24 Sept. or adjournment thereof" This I immediately attended to - I have represented your case strongly before Rau about the Italian engines and he seems impressed and asked me to leave your letter to me with him - As regards the feeder regulators it seems that Lieb has told Columbo that they were worthless and could not be used, and that you used no such thing in New York. I think I have a chance of taking one of the Porters and I shall decide in a day or so for the Nice exposition - Our people want to put up a C but I think better to put 2 '500 lights' and a Porter I think I shall persuade them -

180 light machine: I have just altered a Z to give 180 lamps quite easy and it works very well indeed -



Armature: Wound like a B
18 wires No 19 each coil
Resistance 0·030 ohms

1883-09-19

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ELECTRICITÉ

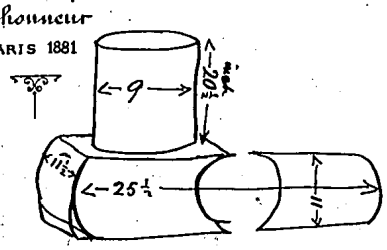
Grand Diplôme d'honneur

PARIS 1881

2.

Ivry-sur-Seine, le

5, RUE DU PARC.



Each core wound with 103 lbs. No 16 wire paper on core but after the bottom layer no paper – the wire passes through a hot solution of parafin and resin on the lathe during winding

Test 1200 turns
140 Amperes
110 Volts

F Dynamo. I have altered all the F dynamos we had commenced & give 1650 turns instead of 2200 which is a speed which gives no satisfaction in the hands of the public –

Armature :- Instead of 2 wires 8 turns around I make 2 wire 12 turns round, this makes the armature more resistance but then we can easily sell them at that

Yours truly

Chas Batchelor

1883-09-21

C. No. DEUTSCHE EDISON GESELLSCHAFT
FÜR ANGEWANDTE ELEKTRICITÄT.

INTERNATIONALE ELEKTRISCHE AUSSTELLUNG
GROSSES EHREN-DIPLOM
Paris 1881.

TELEGRAMM-ADRESSE:
Edison Berlin.

Reichsbank Giro-Conto.

BERLIN W.
96 Leipziger Strasse.

Deutsche Edison Gesellschaft für angewandte Elektricität BERLIN W. 96 Leipziger Strasse 96.

Sept. 21. '83.

Thos. A. Edison. Esq.

Dear Sir.—

Your long and interesting letter of several weeks ago has been received and was translated into German for the perusal of the managing Directors & others and in a few days I will endeavor to answer the same and give you further information as to the Cos progress &c but I now write only a few hasty lines about a matter of considerable importance to us. Our Central Station at the Clubs Buildings I mentioned in my last as being under way are almost completed and having now received the

1883-09-21

J. No. .....

DEUTSCHE EDISON GESELLSCHAFT
FÜR ANGEWANDTE ELEKTRICITÄT.

INTERNATIONALE ELEKTRISCHE AUSSTELLUNG
GROSSES EHREN-DIPLOM
Paris 1881.

TELEGRAMM-ADRESSE:
Edison Berlin.

Reichsbank Giro-Conto.

BERLIN W.,
96 Leipziger Strasse.

2/ Concession from the municipality for the erection of the boilers & machines in our office & building adjoining we are arranging for same & have completed all the wiring. Now as in the clubs & other places mentioned, including a large cafe &c are to received the light & pay same by meter we are fitting up now a place as a meter department, and we request you will send us at once a young man from your New York Station with all the latest data of meter tests as made in New York, I understand the character of meter has been considerably changed the adjustment of plates, shunts, compensation, & density of solution &c for these reasons as well as desiring to-

1883-09-21

J. No. .....

DEUTSCHE EDISON GESELLSCHAFT
FÜR ANGEWANDTE ELEKTRICITÄT.

INTERNATIONALE ELEKTRISCHE AUSSTELLUNG
GROSSES EHREN-DIPLOM
Paris 1881.

TELEGRAMM-ADRESSE:
Edison Berlin.

Reichsbank Giro-Conto.

BERLIN W.,
96 Leipziger Strasse.

Bergmann can make them as large as you want them
to 300 to 500 lights

3/ Profit by the experience you have had in your central station work, and also on account of our having here no one who can give the time to it or who has sufficient experience It is not necessary the man who comes should speak German as I have a fellow here who will render him with myself every assistance, Mr Rathenau requests you will at once cable us upon receipt of this when the man leaves, it is very important we should have him at once. and also that we get the balance of our order for 1/2 Dry meters each from from Bergmann & Co the no; as for

1883-09-21

J. No. [redacted]

DEUTSCHE EDISON GESELLSCHAFT

FÜR ANGEWANDTE ELEKTRICITÄT.

INTERNATIONALE ELEKTRISCHE AUSSTELLUNG
GROSSES EHREN-DIPLOM
Paris 1881.

TELEGRAMM-ADRESSE:
Edison Berlin.

Reichsbank Giro-Conto.

BERLIN W.,
96 Leipziger Strasse.

4) received is 1 for 6 lights 1 for 12 lights 2 for 25 lights 1 for 50 lights 1 for 100 lights.
and in addition we wish for 3 of as size for 150 to 200 lights

We shall keep the man sent for our meter Dept. for our Central Station project which is still progressing.

Hoping you will send man or at least a boy from your New York Dept. and also hoping to write again in few days about machines &c &c I am

Yours very respectfully

W. D. Hammer

P.S. How high do you make your meters for no of lights

a P5

Blank No. 3.

1883-09-21

No. 41 **CABLE MESSAGE.** 840

THE WESTERN UNION TELEGRAPH COMPANY.

Check Ivory 8

All CABLE MESSAGES received for transmission must be written on the Message Blanks provided by this Company for that purpose, under and subject to the conditions printed thereon, and on the back hereof, which conditions have been agreed to by the sender of the following message.

A. R. BREWER, Secretary. NORVIN GREEN, President.

Received at 852 BROADWAY Sept 21 1883

Arnoaide my
Edisons
65 - 5 Ave

Write. Henydecoper
Amsterdam Prices Addrington
Engines
Co

To guard against mistakes on the lines of this Company, the sender of every message should order it repeated; that is, telegraphed back from the terminus of said lines to the Originating Office. For such repeating, the sender will be charged in addition, one half the usual tolls of this Company, on that portion of its lines over which such message passes.

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This Company is not to be liable for damages in any case, where the claim is not presented in writing, within thirty days after the sending of the message.

LAWGAUNLESS

32

8 September 21/13

Chas Batchelor

Are you to write to Mr Clark

1883-09-24

SOCIÉTÉ ÉLECTRIQUE EDISON
SOCIÉTÉ ANONYME
Au Capital de 1 million de francs

EXPOSITION INTERNATIONALE D'ÉLECTRICITÉ
Paris 1881
GRAND DIPLOME D'HONNEUR

ADRESSE TÉLÉGRAPHIQUE
EDISON, PARIS

Paris, le 24 th Sept.bre 1883.

33, Avenue de l'Opéra

Thomas Alva Edison Esq.
New-York.

Dear Sir,

Your favor of Sept.br 11th duly came to hand enclosing an original letter from Mr. J. Schmitt. St Dié, dated August 28th, for which we thank you very sincerely; we shall keep our attention on Mr. J. Schmitt to protect our interests.

Referring to your invoice of Aug.st 20th for 3.800 lamps shipped to Antwerp, we beg to inform you that the casks only contained:

N° 2.943	150	lamps 10 candle power
" 2.944	400	" " " "
" 2.945	400	" " " "
" 2.946	400	" " " "
2.947	400	" " " "
making	2.950	" " " "

This has been verified twice by taking all the lamps out of the barrel.

Please then give us credit for 50 lamps x $ 0,60 = $ 30 which you

will deduct from your next account.

We remain, Dear Sir,

Very truly yours,

SOCIÉTÉ ÉLECTRIQUE EDISON

ADMINISTRATEUR DÉLÉGUÉ

Sept 10 24

French Co
re shipping of
Temple to Philadelphia

a.p.s.

1883-09-27

Milano
Italia
Sep 27th 1883.

Thomas A. Edison Esq.
Dear Sir;
One of the Machines we have just received here from Antwerp arrived here with parts of the valve motion of the attached A & S Engine broken. As they have no Indicators here adapted for indicating high speed Engines I would be obliged if you would send me a set of Tabor Indicators. They would be of great service to me in my work here and any I may have to do elsewhere. Hoping you will send them immediately
I remain
Yours very respectfully
John H. Lieb Jr.

1883-09-28

Blank No. 3.

No. 50

CABLE MESSAGE.

930

THE WESTERN UNION TELEGRAPH COMPANY.

All CABLE MESSAGES received for transmission must be written on the Message Blanks provided by this Company for that purpose, under and subject to the conditions printed thereon, and on the back hereof, which conditions have been agreed to by the sender of the following message.

A. R. BREWER, Secretary. NORVIN GREEN, President.

Check. Berlin 17

65 Edison 5 Ave / my

852 BROADWAY

Received at Sep 28 1883

Telegraph price 10000 ~~Blamp~~
A lamps 1000 B lamps
Different Bolts Earliest delivery
Edison

~~Ho~~ should quote the low price
you gave by letter
how quote letter my
immediately

1883-10-04

COMITATO

PER LE APPLICAZIONI DELL' ELETTRICITÀ

« SISTEMA EDISON » IN ITALIA

Via Manzoni, 12 A.

Indirizzo per Telegrammi
EDISON-MILANO

MILANO, 4th October 1883

Th. A. Edison Esq.
New York

Dear Sir

We are in possession of your esteemed favours of the 21st ult. and confirm our cable of yesterday:
"Your accounts settled Paris"

We think better to send always funds to Paris for all payments to be made to you, and we have disposed accordingly in this instance also, for payment of material ordered lately to you. However if you prefer to have the payment directly, you can follow the system used for our first orders, and draw upon C. J. Hambro et fils of London for the amount of goods shipped, against delivery of B. O. L., giving us notice of the shipment by cable.

We expect therefore to be noticed within a few days that you have shipped the "H" machine and also the 2000 A lamps (from 100 to 104 Volts) which, according to your cables, we hoped to have sooner.

We should be obbliged if you will ship at the

ordered

same time not only the Circuit-breaker and uprights ordered by cable, but also another set of them, as spare ones.

+ We thank you for your kind information about the "C" dynamo; but as we could not wait such a long time as you asked for delivering it, we have accepted the offer of a "C" dynamo existing in the Depot of Antwerp, made to us by the Compagnie Continental. For this and the 5th "C" dynamo supplied recently to us by the same Compe Continentale out of the Antwerp Depot we will utilize the two spare regulators sent by you in addition to the regulators for the first four dynamos. The two sets of Circuit-breaker and uprights ordered above will serve for the 5th and 6th dynamo besides the spare set already sent with the first machines.

We have written yesterday to the Anfonia Compy offering the same terms of payment used with you, viz. drawing upon London for the amount.

We have sent to Bergmann & Co. upon suggestion of Mr Bailey, two sockets out of the 500

of the last shipment. We have found them so roughly made, besides the general defects of the neo-model of Key-sockets, that we will not take them without a reduction in the price of not less than 50%.

We have taken note of the details you have kindly given us about the new machines you are preparing and hope to be able to give you some orders, especially if you will inform us about their price, size, speed etc. — We hope also to order you within a few months at least two "C" dynamos, as soon as the lighting of the Scala will prove to be successful as we trust it will.

For your guidance, whenever we order anything directly to you, we inform regularly the Compagnie Continentale.

We will resume by giving you some more details of our Central Station in addition to those sent you in our last letter. — We light now regularly the Teatro Manzoni, which is considered by everybody to be a very fine specimen of electric lighting in a theatre. We have at present 1100 A lamps on, working from 5½ to 1½ c

Oct 4/88

the night, with two dynamos, one Arrington and one Porter. Every thing goes right under the direction of Mr Lieb, who is very active and intelligent, but the engines have given and give still much trouble. We hope however that little by little this difficulty will be overcome. We have ordered the Amperometer you have given the detail of to Mr Lieb. We have also experimented for a long time upon the Meters, and have now them on for the first time in 8 or 10 installations.

We remain dear Sir

COMITATO PER LE APPLICAZIONI DELL'ELETTRICITA'
SISTEMA EDISON, IN ITALIA

G. Colombo

1883-10-04

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ELECTRICITÉ

Grand Diplôme d'honneur

PARIS 1881

Ivry-sur-Seine, le

5, RUE DU PARC.

Oct 4 1883

My dear Edison,

Yours of 21st to hand

You say 300 light machine 260 amperes 112 Volts 1100 Rev. for £1000 — I have not said anything ~~because~~ to them here about this machine because I make here a machine 950 Rev. 300 lights 110 Volts for £400 I will get dimensions of it here & send you. How is it it costs so much there?

Get your cable on Armington will attend to it immediately.

Yours "Batch"

1883-10-10

Mr. Edison,

I have received from Batchelor his catalogue of goods which he sells to the Societe Electrique and others. Also the prices. I have asked Mr. Hutchinson to prepare a comparative list of these prices with ours here. It will be an interesting document and I will ask Hutchinson to show it to you.

S. B. Eaton

Oct. 10th. 1883.

per Mc.G.

1883-10-10

Oct 10th 1883

My dear Edison,

Yours of 26 Sept to hand — 100 light drawings to hand but the most important part of the information is not there that is the size and amount of wire on armature ~~and magnets~~ — As you say you change from the 2 coils to 1 I think I shall not change the 120 light — I see the English Company is asking about prices here for lamps and our company I find out have already sent some there — With the price you have given for 16 and 8 I think you will hold that market easy enough — They never asked me to furnish them and I only accidently found out they had been sent.

I have made a lot of experiments and have come to the conclusion that the long magnet is not worth a damn!!! excuse me for the strong language!

As I am making an estimate (which is almost finished) for a Station here of 24000 lights (guaranteed 5 hours per day), I should like to know what is your actual experience with 3 wire system? Can you in practice work more than 2 amperes per millimetre on the underground conductors?

If you give 10% loss on conductors with 3 wire system, the short feeders would require to carry ~~[illegible]~~ more amperes per section than the long ones therefore would it not be better in your mind to have the station divided in two

one half feeding out to the [illegible] with 10% loss and the other half with less loss

You see if you have 1000 lamps at 100 meters on one feeder & you give 10% loss you have a current of about 4 amperes per square m.m. but if you have 1000 lamps at 200 meters then in that conductor you have a current of 2 amperes per m.m. So it seems to me you have got to put the copper in the short conductors to carry the current & then loose it again in the feeder regulator — But it seems to me better to have one half of each a big station working at 110 volts & 1/2 at 220 volts. I don't mean outside but inside the station — Another way would be to keep the machines entirely separate and pump into any feeder with accumulators two or three machines until you receive tested right —

Give me a few points please

"Batch"

@

Send this to Sprague to answer.

Write Batch that if he will send a Canvass showing maximum lights we will agree to send him delivery at a quantity in 3 days after its arrival

1883-10-12.

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ÉLECTRICITÉ
Grand Diplôme d'honneur
PARIS 18[illegible]

Ivry-sur-Seine, le 12th October 1883
5, RUE DU PARC

T. A. Edison Esqre
New-York.

Dear Sir

We understand we have got to pay to the Armington & Sims Co. a 10% royalty on the 2 engines we have built here, and that this royalty is calculated on the factory's selling price which we do not know.

We therefore should be obliged by your letting us know on what sum the 10% in question is payable.

Awaiting your kind reply we remain
Yours faithfully

SOCIÉTÉ Indusle et Commle EDISON
Le Directeur
R. Prieur

~~10 percent on the~~
factory sells same price
as a.r.s. 10 pct off the
goes to a.r.s.

[TRANSLATION FOLLOWS]

1883-10-13 1

INSTALLATIONS D'ÉCLAIRAGE ÉLECTRIQUE
Système Edison
SEUL DIPLÔME D'HONNEUR
pour l'éclairage Electrique par Incandescence
EXPOSITION INTERNATIONALE D'ÉLECTRICITÉ
PARIS 1881
SEULE MÉDAILLE D'OR
pour Système complet d'Eclairage Electrique
· EXPOSITION ·
· INTERNATIONALE D'ÉLECTRICITÉ ·
AU PALAIS DE CRISTAL
LONDRES 1882
INSTALLATIONS
DE
Transmissions de Force motrice stationnaire par l'électricité.
LAMPES EDISON
MACHINES ÉLECTRO DYNAMIQUES
de toutes dimensions.
ACCESSOIRES
de tous genres pr installations
D'ÉCLAIRAGE ÉLECTRIQUE

Adresse Télégraphique ÉLECTRICITÉ, Genève.

Société d'Appareillage Electrique

8 · Boulevard du Théâtre · 8

GENÈVE

Genève, le 13 Octobre 1883

Monsieur Thomas A. Edison

New York
65 Fifth Avenue

Cher Monsieur

Nous avons bien reçu en son temps vos estimées lettres des 10, 12 & 28 Septembre ainsi que les pièces qu'elles nous annonçaient, notamment un envoi contenant album, clichés, catalogues brochures etc... Nous vous en remercions vivement & venons reprendre là où il y a lieu, les sujets traités dans ces lettres.

Nous sommes extrêmement satisfaits d'apprendre que vous êtes en train de construire des machines dynamos de nouveaux types qui sont plus économiques relativement à leur force que les types construits jusqu'ici & nous espérons que cette baisse de prix contribuera à en répandre l'emploi plus rapidement.

[TRANSLATION FOLLOWS]

1883-10-13 2

Nous avons reçu le 11 Courant les plans de la machine "I" 100 lampes et vous en remercions nous attendons ceux de la machine de 400 lampes que vous annoncez votre lettre du 28 Septembre.

Nous vous prions de nous envoyer également les plans des machines de 25 50, 200 & 300 lampes aussitôt & à mesure que ces types seront arrêtés. Il nous faudrait aussi pour chaque machine connaître :

I. La vitesse qui correspond à la tension normale de 110 Volts,

II. En attendant que vous puissiez nous en envoyer les plans, nous indiquer :

a) la superficie de terrain occupée par la machine

b) son poids

c) son prix

d) le temps exigé par vous pour la construction d'un de ces types dans le cas où nous serions appelés à vous passer un ordre

2° A ce sujet des machines l'album intitulé "The Edison Light" édité par "The Edison company for isolated Lighting" dont vous nous avez adressé quelques exemplaires contient de nombreux détails sur les machines à vapeur sur les sockets, porte lampes etc mais ne contient peu sur les machines dynamos N'y aurait-il pas un album

[TRANSLATION FOLLOWS]

1883-10-13 3

INSTALLATIONS D'ÉCLAIRAGE ÉLECTRIQUE
Système Edison
" SEUL DIPLÔME D'HONNEUR
pour l'éclairage Electrique par Incandescence
EXPOSITION INTERNATIONALE D'ÉLECTRICITÉ
PARIS 1881
SEULE MÉDAILLE D'OR
pour Système complet d'Eclairage Electrique
· EXPOSITION ·
· INTERNATIONALE D'ÉLECTRICITÉ ·
AU PALAIS DE CRISTAL
LONDRES 1882
INSTALLATIONS
DE
Transmissions de Force motrice stationnaire par l'électricité.
LAMPES EDISON
MACHINES ÉLECTRO DYNAMIQUES
de toutes dimensions.
ACCESSOIRES
de tous genres pr installations
D'ÉCLAIRAGE ÉLECTRIQUE

Adresse Télégraphique ÉLECTRICITÉ, Genève.

Société d'Appareillage Electrique

8 · Boulevard du Théâtre · 8

GENÈVE

Genève le 18

album plus spécialement consacré à ces machines & donnant plus d'indications sur leur poids leur vitesse, etc.

3° Nous prenons note des escomptes faits par MM Bergmann & Co.

4° La Edison Tube Company a-t-elle un catalogue? Si oui Prière de nous le faire adresser en nous indiquant quelles conditions cette Société nous fera.

Elle pourrait peut être nous envoyer quelques échantillons.

5° Nous prenons note des prix indiqués pour les lampes mais nous avons une observation à vous présenter.

La facture de lampes du 1er Mars nous comptait les lampes de 8 & de 16 bougies à $0.50 & celles de 32 bougies à $0.60. La facture du 9 Mars nous calculait les lampes de 8 & de 16 bougies à raison de $0.40. au reçu de cette dernière facture &

[TRANSLATION FOLLOWS]

1883-10-13 4

facture & dans le but de vulgariser toujours plus votre lampe en faisant également concurrence aux lampes Swann vendues en Suisse bon marché; nous avons baissé le prix de vente de nos lampes & cela était d'autant plus nécessaire que les constructeurs de dynamos de différents systèmes obtenaient ces lampes à Londres à 3 sh. 6. la pièce. Nous supposons que dans votre lettre du 10 Septembre (page 5) il s'est glissé une erreur de plume lorsque vous vous fixiez le prix de $0.50 pour les lampes de 8 & 16 candles & $0.75 pour celles de 32 bougies nous pensons qu'il faut lire $0.40 pour 8 & 16 comme dans la facture du 9 Mars & nous croyons également que vous avez voulu nous faire le prix de $0.60 & non $0.75 pour celles de 32 bougies comme dans factures du 1er Mars & 9 Août.

En résumé nous pensons que vous nous facturerez les lampes aux prix suivants:

8 & 16	bougies	$0.40
10	bougies	$0.50
32	"	$0.60
50	"	$1.–
100	"	$1.50

Veuillez s'il vous plaît nous aviser de votre décision le plus tôt possible afin que nous puissions modifier notre prix courant en conséquence.

[TRANSLATION FOLLOWS]

1883-10-13 5

INSTALLATIONS D'ÉCLAIRAGE ÉLECTRIQUE
Système Edison
SEUL DIPLÔME D'HONNEUR
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8 · Boulevard du Théâtre · 8

GENÈVE

Genève, le 18

Nous regrettons de ne pas pouvoir pour le moment vous passer des ordres de lampes par série de 10000. Notre champ d'action n'est pas aussi vaste, tant s'en faut, que ceux des compagnies Anglaise & Française.

A propos des lampes nous désirons savoir

a) quels sont les chiffres de tension en volts pour lesquels vous faites maintenant celles de chaque sorte; cette indication nous permettra dans nos commandes ultérieures de désigner la tension dont nous avons besoin

b) si possible envoyez nous des lampes ayant un collet de Plâtre, celles ci sont préférées aux autres par certains de nos clients.

5. Antérieurement à la constitution de notre Société Mr Turrettini vous avait demandé l'envoi de vos plans pour chemin de fer & tramways électriques, vous nous

[TRANSLATION FOLLOWS]

1883-10-136

avisiez cet envoi dans votre lettre du 6 Mars. mais ne l'avons pas encore reçu.

Nous vous serions reconnaissants de ne pas oublier cet envoi, car on est venu savoir nos intentions à propos d'affaires de ce genre

6° Nous prenons acte du fait qu'il ne nous est pas possible de nous autoriser à faire des affaires dans les pays où aucune Société émanant de vous n'est encore constituée.

A cause de cela nous vous prions de nous donner la liste des Sociétés constituées sous vos auspices en Europe & des pays qui leur sont respectivement attribués, afin que si on nous propose quelque affaire hors de Suisse (on nous a fait des ouvertures pour un éclairage en Espagne) nous sachions si c'est à une de ces Sociétés ou à vous-mêmes que nous devons nous adresser.

7° Veuillez nous dire comment se compose le compteur? Pourriez vous nous donner les indications nécessaires pour en faire usage

Nous étudions actuellement une installation par station centrale à Genève & serions bien heureux de pouvoir nous servir de cet appareil.

8° Pourriez vous nous adresser une copie des brevets que vous avez pris depuis deux ans relatifs à l'Appareil Wenge électrique.

Voilà Monsieur, bien des demandes nous comptons sur votre obligeance & sur

[TRANSLATION FOLLOWS]

1883-10-13 y

l'interêt que vous portez à notre Société pour nous renseigner aussitôt que possible sur ces différents points qui sont pour nous tous très importants.

Nous recommandons à vos bons soins une rapide réponse en ce qui concerne les dynamos prix etc & le compteur.

Veuillez agréer, Monsieur, nos très respectueuses salutations

SOCIÉTÉ D'APPAREILLAGE ÉLECTRIQUE
A GENÈVE

L'Administrateur délégué

A. Achard

Nous avons rayer l'art 5. Mr Ferretti nous avait dit qu'il avait reçu les dits plans; ce que nous ignorions jusqu'à présent.

[TRANSLATION]

1883-10-13

Translation

Geneva Oct 13th 1883

Mr. Thomas A Edison

65 Fifth Ave

New York

Dear Sir

We have duly received your favors of Sept 10th 12th & 28th also the packages advised by them, notably that containing illustrations, stereotypes, catalogues, pamphlets etc. We thank you sincerely for them and resume, where necessary, the subjects treated in those letters.

We are very glad to learn that you are about to build dynamos of a new and cheaper type than those hitherto constructed and we trust that their reduced cost will help to dispose of them more rapidly.

On the 11th inst. we received the plans (tracings) of dynamo T of 100 lamps and now expect those of the 400 light dynamo, advised in your favor of Sept 28th.

We would be much pleased to also receive tracings of 25, 50, 200 and 300 light dynamos, provided these sizes are also available. It would be well for us to know too of each dynamo

I The rapidity (revolutions) required ~~corresponding~~ for a normal pressure (tension) of 110 volts.

II. Until we receive tracings from you, we should know

a) the ground space needed by each size

b) weight of each size

c) Price " "

d) time required by you to construct them in case we should have occasion to give you an order

[TRANSLATION]

1883-10-13

2.

2) On the subject of dynamos: The illustrated catalogue "The Edison Light" published by the Edison Company for Isolated Lighting of which you have sent us several copies contains numerous details of steam-engines, of sockets, fixtures, etc, but contains precious little of dynamos. Is there no catalogue more specially devoted to these machines and giving better information as to their weight, revolutions, etc?

3) We have taken note of the discount made by Messrs Bergmann & Co.

4) Has the Edison Tube Co a catalogue? If so please send us one giving terms this company will allow us. Perhaps they would also send us some samples.

5) We note your ~~lamp~~ prices for lamps, but venture to make a remark: The invoice on lamps of March 1st quotes lamps of 8 and 16 candles at $0.50 and lamps of 32 candles at $0.60. The invoice of March 9th however charges us for lamps of 8 and 16 candles at the rate of $0.40

After receiving this last invoice and with the object of rendering your lamp more popular by competing with the Swan lamps which are sold at a low price in Switzerland, we have reduced the prices of your lamps, which was absolutely necessary the more so, as the ~~builders~~ manufacturers of the different systems of dynamos obtained these lamps in London at 3/6.

We presume therefore that a clerical error has slipped in on page 5 of your letter of Sept 10th where you charge $0.50 for lamps of 8 and 16 candles and $0.75 for those of 32 candles. We think it should read $0.40 for 8 and 16 candle lamps as is the case in invoice of March 9th

and we also believe that you intended to charge $0.60 not $0.75 for lamps of 32 candles as in the invoices of March 1st and August 9th.

In short we think you might invoice us lamps at the following prices.

8 & 16	candles	$0.40
10	do	0.50
32	do	0.60
50	do	1.–
100	do	1.50

Will you kindly advise us of your decision as soon as possible, so that we can modify our price list accordingly.

We are sorry that for the present we will be unable to give you orders for lamps in quantities of 10,000. Our territory is not as extensive, by any means as that of the English and French companies.

Concerning lamps we desire to know:

a.) the (tension) pressure in volts to which you adapt the different lamps which you are manufacturing. This information would enable us to specify in future orders the (tension) pressure required.

b. If possible send us lamps with the (collar) base made of plaster paris as they are preferred by our clients.

6) We note that you cannot authorize us to do business in countries, where no company emanating from the parent company is as yet in existence.

For this reason we request a list of all companies established under your auspices having in Europe naming also the territory allotted to each of them.

[TRANSLATION]

1883-10-13 4.

so that if anybody should offer us business outside of Switzerland (we have recently had inquiries from Spain) we would know whether we should have to apply to a company or to yourself.

7) Will you please instruct us about the meter? Can you give us the requisite information how to use it? We are at present occupied in studying a Central Station installation for Geneva and would be glad to make use of this apparatus.

8.) Would you favor us with a copy of patents bearing on the subject of electric lighting, secured by you during the past 2 years.

Please excuse the multitude of our requests, Relying on your good will and the interest you take in our company, we trust that you will advise us on the various points as soon as possible, as all of them are of the greatest importance to us.

We solicit the promptest possible reply as to dynamos, prices, etc, also in regard to the meter.

Accept, dear Sir, the assurance of our highest esteem

Société d'appareillage électrique

A. Achard

Director

1883-10-13

J. No. 5764

DEUTSCHE EDISON GESELLSCHAFT

FÜR ANGEWANDTE ELEKTRICITÄT.

INTERNATIONALE ELEKTRISCHE AUSSTELLUNG
GROSSES EHREN-DIPLOM
Paris 1881.

TELEGRAMM-ADRESSE:
Edison Berlin.

Reichsbank Giro-Conto.

BERLIN W.,
96 Leipziger Strasse.

13th October 1883

Thos. A. Edison
65 Fifth Avenue
New York

Dear Sir

We have your favour of the 28th Sept. and hope to receive the blue prints of the 100 light machine in the course of a day or two, and those of the "F" machine as promised, soon.

We further beg to confirm the following cable correspondence between us; from us:

"Telegraph price 10000 A. lamps 10000 B lamps different volts earliest delivery."

Your reply:

Can deliver lamps immediately terms according my letter Oct 8th to Paris Company.

From ourselves 4th October:

"Ship Hamburg 10000 B lamps 15000 A lamps

T. O.

From you: 7th Inst.

"Arrange payment here Shipments lamps against documents."

From us: 9th Inst

"Have arranged payment lamps against documents."

From you: 9th Inst.

Through whom payment arranged?

From us: 11th Inst.

Speyer Company have instructions by letter

From you: 12th Inst.

"Lamps shipped Sicilia ~~eighth~~ instruct Speyer by cable"

In consequence we have requested our Frankfort bankers Mess. Seb. Sulzbach to open the required credit with Mess. Speyer & Co. by telegraph, and hope now that the shipments will arrive in quick succession —

Regarding our business in general, we cannot help telling you, that yourself and our Paris friends have got us into a very sad dilemma

1883-10-13

5764 / Edison

DEUTSCHE EDISON GESELLSCHAFT
FÜR ANGEWANDTE ELEKTRICITÄT.

out of which we at present see no way at all, as matters are going.

We had hoped to make the German business one which ought to have taken the lead on this continent. Everyone was well disposed towards the undertaking and the soil was carefully and with circumspection cultivated by us to receive the grain we meant to sow. As it is now, we have great difficulty in doing anything at all, and we are left far behind in the electric race which undoubtedly does take place in Europe.

In consequence of the information Mr Baily had given us on the new H Machine, and your assertion that it would run 500 lamps, we passed Messrs Siemens & Halske an order for fifteen machines of this type. Before the trial of the machine took place, they gave us to understand that in their opinion it could not run more than 400 lamps. The trial

took place, and you have been informed that the armature was burnt through the first day and Mess. Siemens & Halske's prediction proved true, and it is not at all to be wondered that they look upon this failure with a considerable amount of satisfaction now! Upon your assurance that the H machine would work 500 lamps we sold this in several cases, and now have to make up the difference out of our pockets. We cannot help saying, but that we have been misled for in your letter of the 28th September last you yourself call the H machine a 400 light one only.

The new 100 light machine also, which Siemens & Halske have to deliver at American prices are too dear and we cannot compete with their own types or Mr Schuckert's.

The price of the Z machine is too dear and none will have it, but the greatest difficulty of all is the circumstance that we have no machines of between 17 and 100 lamps.

1883-10-13

DEUTSCHE EDISON GESELLSCHAFT
FÜR ANGEWANDTE ELEKTRICITÄT.

These are the types most in request, and as we cannot furnish them, all the orders go to the competition. Many weeks ago we were promised the drawings or models of the new 25 and 50 light machines, but as yet there is no trace of them.

All this is very discouraging to us, and the uncertainty existing as to your new types creates a want of confidence, which we are unable to counteract. At the same time that you advise us of having mailed us the prints of the 100 light machine, you testify to their being obsolete by stating that you are thinking of using only one pair of coils. Can we, as sensible men, set to work now to build the 'T' machine under these circumstances? We think not!

While we are spending enormous amounts in advertising the Edison light and spare no

expense in promoting our mutual interest, we have to look on how our competitors get the orders, as we have no machines suitable to the demand.

We therefore earnestly request you to make an effort and see that this unbearable state of affairs is brought to a speedy end.

Almost all what we have said above refers also to Paris, whence we get scarcely any help and that little so dilatorily and with so much difficulty, that we are sliding from one predicament into another constantly.

If all these evils we have complained of, are not speedily abolished, there is very little chance of our doing any business at all. We thus urgently request you to do all in your power to place us in a better position for doing business by sending us more information than has been the case so far.

We are, Dear Sir, Yours truly

DEUTSCHE EDISON GESELLSCHAFT
FÜR ANGEWANDTE ELEKTRICITÄT.

E. Mathieu L. Kryo Pichon

Copirt.

P P 1883-10-14

Major Eaton,

Professor Vogel, whose card I enclose, called here yesterday with a letter of introduction from the German Company to Mr. Edison. I informed him that Mr. Edison was out of town, as I expected that Mr. Edison would go to Brockton yesterday afternoon, and, inasmuch, as I am going out of town to-day myself, I suggested to Professor that he should call on you Monday morning and that you would give him every facility to look into the electric light here in New York. I think that Mr. Edison will be in the City to-morrow, and if so, he will be at Bergmann's, and you might tell Professor Vogel that when he goes to Bergmann's he can doubtless see Mr. Edison there. It is, however, uncertain, as Mr. Edison's stay depends mainly upon ~~some instrument~~ whether some instruments are finished or not.

S. Insull,

October 14th. 1883. per G. D

1883-10-15

Cie CONTINENTALE EDISON
SOCIÉTÉ ANONYME
Au Capital de 1 million de francs

EXPOSITION INTERNATIONALE D'ÉLECTRICITÉ
Paris 1881
GRAND DIPLOME D'HONNEUR

ADRESSE TÉLÉGRAPHIQUE
EDISON, PARIS

Paris, le 15 Octobre 1883

33, Avenue de l'Opéra

If you will read the remarks of the Chairman of Swan Co at the last meeting you will see that these steps are part of a system of New York harrassing + coercion to scare you into a compromise which should be made — the [illegible] 21 & 28 Sept were [illegible] not applicable to Europe as shown by our experience here when [illegible] completing [illegible] fighting [illegible]

Th. A. Edison Esqre
New York

Dear Sir,

Contents of your favors of 11 Sept (written by Major Dyer) 21 & 28 Sept were duly noted.

We just receive your favor of the 1st concerning our Austrian suit.

We were very surprised to hear from you that Dr Neuda addressed himself to you directly as he had no instructions from us to do so. We may even add that he wrote to you without writing to us a word about Swan's attack.

There is no need for you to send him any power.—

The President of this Company, M Forges is in Vienna & we wrote to him to know the maximum time we can obtain in Austria for our reply to Swan & shall write you the answer.—

Meanwhile, we beg to confirm our yesterdays cable.

Rybeschy, New York.

"Send quickest reply to Swan, has begun
"same suit Germany."

We can only advise you to send the defence you have kindly prepared as speedily as possible & we will meanwhile do our utmost to obtain a delay.

Swan has made an application against our principal Lamp patent (Set 3) in Germany & wants to begin there a suit similar as in Austria.

Yours very sincerely

COMPAGNIE CONTINENTALE EDISON

Administrateur

Cable 11/15/13

W. Comp. Lond.

Edison

re the same subj

1883-10-17

Memorandum

SOCIÉTÉ ÉLECTRIQUE EDISON

Société Anonyme Capital 1 million de francs

33, Avenue de l'Opéra

PARIS, le 17 Oct 1883

M My dear Insull

I sent Edison a telegram for lamp business today about lowering price of lamps in England — Please ~~give~~ tell Upton to credit my acct with £9 as per enclosed slip as it was for Lamp Co not you

Yours Batchelor

Can you not sell some European
for me I am obliged to pay
my stock here immediately —
or spoil that something else

Yours
B

What have you done about
machine work B

Cop 1/13
C Batchelor
Tell send
to Mr Edison

Lamps

1883-10-17

SOCIÉTÉ ÉLECTRIQUE EDISON
SOCIÉTÉ ANONYME
Au Capital de 1 million de francs

EXPOSITION INTERNATIONALE D'ÉLECTRICITÉ
Paris 1881
GRAND DIPLOME D'HONNEUR

ADRESSE TÉLÉGRAPHIQUE
EDISON, PARIS

Paris, le Oct. 17th 1883.

33, Avenue de l'Opéra

Mr Thos. A. Edison
New York.

Dear Sir,

We beg to acknowledge receipt of your two favors of Oct. 4th and 5th, the contents of which has been settled in the meantime. We regret to inform you that we receive from all parts complaints on the quality of all the lamps you have sent us since two months back. It seems that these lamps are no more to be used in quite a short time. Under these circumstances we fear that we will be obliged to replace a great part of them, and, of course, we would thus be forced to ask you for damages up to the duration of 600 hours you garantee. For the lamps made in France we giwarantee 800 hours and up to date we have always gone beyond this duration.

We remain

Very truly yours.
SOCIÉTÉ ÉLECTRIQUE EDISON

Rauh

ADMINISTRATEUR DÉLÉGUÉ

1883-10-14

INSTALLATIONS D'ÉCLAIRAGE ÉLECTRIQUE
Système Edison
SEUL DIPLÔME D'HONNEUR
pour l'éclairage Electrique par Incandescence
EXPOSITION INTERNATIONALE D'ÉLECTRICITÉ
PARIS 1881
SEULE MÉDAILLE D'OR
pour Système complet d'Eclairage Electrique
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D'ÉCLAIRAGE ÉLECTRIQUE

Adresse Télégraphique: ÉLECTRICITÉ, Genève.

Société d'Appareillage Electrique

8 · Boulevard du Théâtre · 8

GENÈVE

Genève, le 18 Octobre 1883

Monsieur Thomas A. Edison
New York
65 Fifth Avenue

Sir

The object of the present letter is to submit to you a question which is rather important for us.

If we are not mistaken, you have agreed with MM Siemens & Halske to found a Company to work your system in the German Empire. But MM Siemens & Halske have as agents MM Shrenberg & Jellweger manufacturers of electric Apparatus at Oetter near Zurich for the whole of Switzerland.

We fear that under pretext to represent MM Siemens & Halske, the said agents may be brought to represent the above mentioned Company and this to encroach on the right that we hold from you and therefore on the rights we have delegated to our own agents in divers towns of Switzerland.

We wish to direct your attention on the chances of conflict which may arise from this

1883-10-14.

situation and we beg of you, in order to enable us to estimate these chances, to communicate to us the form of your agreement with M M Siemens & Halske.

We remain Dear Sir yours very truly.

SOCIÉTÉ
D'APPAREILLAGE ÉLECTRIQUE
GENÈVE

L'Administrateur Délégué.

A. Richard

1883-10-21

Hotel Kaiserhof, Berlin, W.
21 October 1883.

My dear Mr Edison;

You probably know that the German Co has ordered the plant for a lamp factory. Hipple has been talked of to organize it. I cannot represent to you too strongly the desirableness of having a competent man who knows all the latest points come from your own factory. As its construction is fully decided, the only thing to be considered is how to secure the best results

I would have tried with Batchelor to induce the Germans to take their lamps from the States, if economy had been the only consideration. But there are two others that cannot be gotten over that are against it. (1) National feeling; (2) The Patent Laws. You may think that national feeling does not weigh against economy, but that is a complete error. Any German interloper would have all the national sympathies, and would hold the German market against a foreign lamp that should be both cheaper and better.

In the next place the patent laws require that the manufacture shall be started and adequate to the supply of the market within three years from the date of the granting of the patent. The mere "working" of a patent which suffices in some countries does not serve here. Your patents would be beaten in

Germany on this ground if the Siemens and Halske contract had not been made and if Siemens would not testify that he had been manufacturing the Edison lamp since last March.

It is an absolute necessity then, that the German Co commence, and commence at once to manufacture for themselves. Siemens is manufacturing, but only at the rate of about 100 a day and provided the German Co. starts a good factory and makes a good and cheap lamp, it is not likely that he will increase very largely his manufacture. But still there is no certainty in regard to this, and as he has a great deal of ambition and can afford to do whatever he likes, the only way to make sure, is to make a better lamp and make it cheaper than he can.

I am not an expert in lamps as you know, but I can certify from the reports that I pick up all about the continent, that the lamps turned out from the French factory do not on the whole give satisfaction; some of them are excellent but the quality is very unequal. Hipple has now been absent from the States so long that he is entirely out of the current of improvements and excepting the stray information that gets over to Paris, is working an old stock of ideas. In the next place he speaks no German, and it is an absurdity to send a man here to instruct Germans who cannot say a word to them except by an interpreter.

The German Co will pay up to 300 Dollars a month for a man that you say is competent to organize the factory and who speaks German. They do not ask him to stay any longer than until he can turn out good lamps, and the entire plant will be ready to his

hand, before he comes here, so that he will have nothing to do but to set it up and get to making lamps.

I have thought that perhaps Upton might come over here for this work, and I think you will see reasons enough, why, if it be possible, you should let him come. The factory here will supply in all probability, Holland, a part of Switzerland, Austria, Russia and whatever is done in the Danubian States. If Upton could come here the last of next month, he will find everything complete, and you can calculate better than I can, how much time it would take to set the thing in operation under these circumstances.

I send a letter in the same mail with this to Eaton giving a resumé of the situation of the lamp patents here in Germany. The blunders of patent agents have as nearly lost your entire situation in Europe as possible. I think the only remedy in Germany is to come to an understanding with Swan. We are almost certain to be beaten unless the patent is made over and this can only be done by the withdrawal of Swan's suit or in a friendly understanding with him. I hope you will go over the letter sent to Eaton today.

I cannot understand how it is that no figures of the New York Central Station can be got hold of. It is now nine months since I cabled from Berlin for them and have been writing and cabling ever since without any result. Every letter that comes from New York tells what a splendid business the Central Station is doing and what big dividends are going to be made and that is as far as we can get. I wrote in August a letter

telling the great damage that the withholding of these figures is doing us and that even if the Central Station showed a loss, which is the universal belief here shared by your best friends, it is better to make a statement of it, than to keep it back.

We could have formed a general Company by this time if any figures had been available from anywhere giving the results of actual exploitation, but no Paris group could be formed in the absence both of definite figures and estimates, and so the matter hangs fire. When I left Paris the 4th Sept. it was expected that the estimates for the Central Station there would be made up by the 10th and that the Paris group could be made up during the month of September. I have been through and prepared for the formation of groups in all the places where we want them, but can bring nothing to a point because there are still no figures or even estimates for submission to the French Engineers who are engaged in examining the business at Paris.

The German Co however is now going in to make the Central Station at Paris if terms are agreed on, as is most likely. They have got a capital of Mks 5,000,000 with nothing for it to do.

A further serious difficulty is that the Edison Co have no machines and the German Co is prospecting to pay interest on its capital. They are also going in with us in Austria where I think a provisional contract with a million florins is quite certain to be formed in the early part of November.

The German group and the Italians are worth more than all the rest we have in Europe and I

hope you will do your part towards encouraging the Germans and lifting them out of the state of discouragement in which they are from the backwardness in getting machines, by helping to start a lamp factory in such a way that they will not flounder round with incompetent direction, such as I am sure they would have with Hipple, and be put in a situation that might result in throwing the business into the hands of Siemens.

Rathenau the director of the German Co. is with the possible exception of Prof Colombo, the best man we have in Europe. I think he is perhaps a more practical man than Colombo, but not so accomplished a technician.

I enclose you in the same mail with this a little pamphlet of Dr Werner Siemens and I wish you would send him one of your photographs with autograph and a nice letter expressing your satisfaction that your interests are in friendly relations.

Some of our people, the Germans among the rest criticized the policy in making up with Siemens elsewhere than in Germany, but when we went to Vienna a fortnight ago, Rathenau, the Bankers here and Porges all said to me, we must have a contract with Siemens or we cannot start any Company. I have never had to do with a person more straightforward and honorable than Dr Werner, whom I like much better than William.

Will you cable "Heraclite" Paris as soon as you get this, what you decide regarding the person for the lamp factory. I leave for Paris tonight and shall be there for some days.

I am dear Sir
Very sincerely Yours
Z. L. Bailey

SOCIÉTÉ ÉLECTRIQUE EDISON
SOCIÉTÉ ANONYME
Au Capital de 1 million de francs

EXPOSITION INTERNATIONALE D'ÉLECTRICITÉ
Paris 1881
GRAND DIPLOME D'HONNEUR

ADRESSE TÉLÉGRAPHIQUE
EDISON, PARIS

Paris, le 22 Avenue de l'Opéra

1883-10-22

Urtis Batch

Lamps

Paris, le

My dear Edison, 25 Oct 22

I telegraphed you a few days ago to give lower price for lamps to England for 10 & 32. I did not think there was any chance of our people taking an order for the A & B — the English people have however given them an order for about 7500 lamps A & B which they are making now — These lamps cost in the factory after all expenses including rent, insurance, etc, etc, etc. 7.50 — the English people pay them 2.25 for them —

There are a great many complaints on the American lamps & people begin to ask for Paris lamps. I don't know whether the lamp factory sends us the best but I wish you would tell upon that he must lose on his European business if he slights us — I think you can only get any of his trade by having a better & longer life lamp than us and the lamps do not hold out the magnificent curves of life that I have brought over with me & showed so much about

Yours truly
Batch

1883-10-27

SOCIÉTÉ INDUS^elle & COMM^le EDISON

Société Anonyme. Capital : 1.500.000 Francs.

à Ivry s/ Seine, 5, Rue du Parc.

Grand Diplôme d'honneur PARIS 1881

Ivry, le Oct 27 1883 188

Edison,

Here's a pretty good thing for tacking up in wet places.

Batchelor

Bergmann

Send Batch. a sample our new dough wire E

[TRANSLATION FOLLOWS]

1883-10-27

Société d'Appareillage Electrique.

Genève, le 27 Octobre 1883

Monsieur Thomas A. Edison
65 fifth Avenue
New York

Monsieur

Il se présente à faire en Suisse une transmission de force motrice d'une certaine importance & que nous desserverions vivement pour obtenir

Il s'agit d'une force disponible de 30 Chevaux qu'il faudrait transmettre à 1 kilomètre de distance (1093,63 Yards) de façon à recueillir au minimum 15 Chevaux sur l'arbre de la machine secondaire.

Nous avons fait des offres dans lesquelles les deux machines primaire & secondaire se chiffrent à £ 1000 – (2435 dollars) elles seraient de 300 Volts & comporteraient un conducteur de cuivre dont la résistance serait de 0,6 ohms pour les 2 kilomètres aller & retour.

Le propriétaire de la manufacture à desservir nous écrit qu'il a des offres de nombreux concurrents & que tous demandent

[TRANSLATION FOLLOWS]

1883-10-27

des prix inférieurs au nôtre. Il résulte évidemment de sa correspondance qu'il attache plus d'importance à l'économie qu'à obtenir un rendement supérieur au minimum de 70 % ci-dessus indiqué.

Comme il ressort de nos lettres antérieures que vous modifiez en ce moment vos types de machines à lumière de manière à obtenir des machines sensiblement meilleur marché que les précédentes, nous pensons que nous en faites peut-être autant pour les machines de tension élevée appropriées à la transmission de force.

Nous vous serons recommandant de nous dire ce qu'en est, et de nous indiquer les machines que nous devrons proposer pour arriver à installer la transmission de force en question aussi économiquement que possible, de façon à obtenir la préférence, ce dont nous serons extrêmement désireux.

Dans l'attente du plaisir de vous lire agréez, Monsieur, nos salutations respectueuses.

SOCIÉTÉ D'APPAREILLAGE ÉLECTRIQUE
A GENÈVE

L'Administrateur délégué

A. Sechaud

1883-10-29

Geneva, 29 October 1883.

Thomas A. Edison Esq.
New York

Please name the machine + size Reo Reo a Gwne, return of power "etc =

A party in Switzerland desires to purchase machinery for the transmission of power, + we wd very much like to obtain the Contract.

He wishes to transmit 30 HP at a distance of 1 Ki (1093.6 yds) in such a manner as to have a minimum of 15 HP on the pulley of the motor.

We made bid to Construct the Dynamo + Motor for fr 13.000, say $2475, with an Electro-motive force of 300 Volts, the resistance of the transmitting wire to be 0.60 ohms for the 2 Kilometers, going + coming.

The proprietor of the manufactory in question informs us that he has offers from many other parties + that they all make lower bids than we do. We infer from the tenor of his letter that he attaches more importance to economy than a desire to obtain a force superior to his minimum of 50%, as stated above.

As you inform us in your last letter, that you are altering the models of your light machine, in order to be able to turn them out cheaper, you are perhaps also making alterations in your high potential machines, such as are used for the transmission of Power, + which will permit you to make them also cheaper.

If such be the case, we would be pleased to have you inform us what machinery we could use to

effect the alternating transmission in the cheapest possible manner, as we are extremely anxious to secure this contract.

Awaiting your reply,

We remain

Electrical Machinery Co.

[TRANSLATION FOLLOWS]

1883-10-29

INSTALLATIONS D'ÉCLAIRAGE ÉLECTRIQUE
Système Edison
SEUL DIPLÔME D'HONNEUR
pour l'éclairage Electrique par Incandescence
EXPOSITION INTERNATIONALE D'ÉLECTRICITÉ
PARIS 1881
SEULE MÉDAILLE D'OR
pour Système complet d'Eclairage Electrique
· EXPOSITION ·
· INTERNATIONALE D'ÉLECTRICITÉ ·
AU PALAIS DE CRISTAL
LONDRES 1882
INSTALLATIONS
DE
Transmissions de Force motrice stationnaire par l'électricité.
LAMPES EDISON
MACHINES ÉLECTRO DYNAMIQUES
de toutes dimensions.
ACCESSOIRES
de tous genres pr. installations
D'ÉCLAIRAGE ÉLECTRIQUE

Adresse Télégraphique ÉLECTRICITÉ, Genève.

Société d'Appareillage Electrique

8 · Boulevard du Théâtre · 8

GENÈVE

Genève, le 29 Octobre 1883

Monsieur Thomas A. Edison
New York
65 Fifth Avenue

Monsieur

Nous avons l'honneur de vous confirmer nos lettres des 13. 18 & 25. courant.

Espérant que vous serez droit à notre demande en ce qui concerne le prix des lampes, nous vous prions de nous expédier dans le but de compléter notre approvisionnement

1000	lampes	B	de 8 bougies	50 Volts	
1000	"	A	16 "	100 "	
300	"	A	16 "	102 "	
20	"	B	8 "	50 "	Conducteurs dépassés
20	"	A	16 "	100 "	"
20	"	A	50 "	100-102 "	sans couleur
20	"	A	100 "	100-102 "	"
[illegible]	"	A	100 "	100-102 "	Couleur rouge rubis
100	"	B	4 à 6 "	la somme des lampes à	

notre disposition faisant si possible 100 Volts.

[TRANSLATION FOLLOWS]

Nous vous demandons instamment de ne pas nous envoyer des lampes à d'autres tensions que celles que nous vous indiquons attendu que nous sommes encore fournis de lampes dans les autres utilités.

Envoyez nous des lampes ayant un bouchet en platine, nos clients les préfèrent, & emballez les dans de petits barils.

Nous attirons votre attention sur le fait que nous avons reçu dans votre dernier envoi, une centaine de lampes ayant la virole cassée; c'est fort ennuyeux, car même après les avoir ressoudées il ne nous est pas possible de les vendre aux clients.

Ayez la bonté de donner des instructions afin que cela ne se reproduise plus.

Nous avons reçu ces derniers temps des observations au sujet de la durée des lampes & plus spécialement des lampes de 8 bougies. Après un certain nombre d'heures d'éclairage 5 - 6 par exemple le globe est si chaud qu'il n'est pas possible d'appuyer la main contre, en outre la moyenne des lampes cassées après une courte durée est assez élevée, pour provoquer, de la part des clients, de nombreuses réclamations.

La Cie Edison de Londres nous ayant parlé d'un type de lampe B de 12 & 16 bougies dites nous à quel prix vous pouvez nous en expédier.

[TRANSLATION FOLLOWS]

1883-10-29

INSTALLATIONS D'ÉCLAIRAGE ÉLECTRIQUE
Système Edison
SEUL DIPLÔME D'HONNEUR
pour l'éclairage Electrique par Incandescence
EXPOSITION INTERNATIONALE D'ÉLECTRICITÉ
PARIS 1881
SEULE MÉDAILLE D'OR
pour Système complet d'Eclairage Electrique
· EXPOSITION ·
· INTERNATIONALE D'ÉLECTRICITÉ ·
AU PALAIS DE CRISTAL
LONDRES 1882
INSTALLATIONS
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Transmissions de Force motrice stationnaire par l'électricité.
LAMPES EDISON
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de toutes dimensions.
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de tous genres pr installations
D'ÉCLAIRAGE ÉLECTRIQUE

Adresse Télégraphique ÉLECTRICITÉ, Genève.

Société d'Appareillage Electrique

8 · Boulevard du Théâtre · 8

GENÈVE

Genève le 31 Octobre 1883

Veuillez nous envoyer directement la facture des lampes que nous vous commandons & en toucher purement & simplement le montant chez MM. F. Iselin Nº a New York contre quittances & bulletin d'embarquement.

Recevez Cher Monsieur nos bien sincères salutations

L'Administrateur délégué
A. Achard

Nous allons passer à Messieurs Bergmann & Cie un ordre à titre d'échantillon,

[TRANSLATION]

1883-10-27

Guina, 39 rue Stade

Thos. A. Edison Esq.

New-York

Sir,

We beg to confirm our respects of the 13th 18th + 26th inst. –

Hoping that you will consider favorably our request in reference to the price of lamps, we beg you to forward us, in order to enlarge our stock –

1000	– B Lamps	8 cp.	50 Volts	
1000	– A "	16 "	100 "	
300	– A "	16 "	102 "	
20	– B "	8 "	50 "	(Colored)
20	– A "	16 "	100 "	(do)
20	– A "	50 "	100–102	
20	– A "	100 "	100–102	
4	– A "	100 "	100–102	(red + blue)
100	– B "	4 to 6 "	the total of lamps	

to place in series, making if possible 100 Volts.

We request you particularly not to send us lamps of different potential than stated, as we are well supplied with lamps of other [redacted] sizes.

Send us lamps with a plaster Paris filling as our friends prefer them; pack them in small barrels. –

We call your attention to the fact that in your last shipment there were about 100 lamps with the brass part [redacted] which screws on loose; this is very annoying, as even after having glued it on, it is impossible for us to sell them. –

Please give instructions so that this does not ha-

our customers have lately complained that [illegible] a short duration, more particularly so the 8 cp. lamps; after being lighted 5 or 6 hours they become so warm that it is not possible to touch them, after a short use the percentage of broken ones is so great that our clients make numerous reclamations. –

The Edison Lindon Co. mentioned to us a type of B lamps, of 12 + 16 cp.; – please give us price, you can invoice to us. –

Please send us, direct, invoice of the lamps we have ordered; Messrs. A. Selin & Co. of your city will pay you amount of same against shipping receipt. –

We remain Very truly yours,

We will give Messrs. Bergman & Co. a trial order.

Bergman & Co
in re to order

1883-10-30

SOCIÉTÉ INDUS^elle & COMM^le EDISON

Société Anonyme. Capital : 1.500.000 Francs.

à Ivry s/ Seine. 5, Rue du Parc.

Grand Diplôme d'honneur PARIS 1881

Ivry, le Oct 30 1883

My dear Insul,

I expect to be free here shortly & come back, is there no possibility of doing anything with a little of my stock as I am dreadfully hurted?

Yours

Batchelor

We must send Batch $1000 at least

OK

1883-10-30

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ELECTRICITÉ

Grand Diplôme d'honneur PARIS 1881

The sooner you return the better

Ivry-sur-Seine, le 5, RUE DU PARC.

Oct 31 1883

My dear Edison,

In the meeting of the Industrielle today we had a stormy time - the subject was your low price of the lamp & the order you got from Germany. Porges was simply crazy, and he said some very insulting things to me as the representative ~~element~~ of the American element there. He is going to write a letter to you or Batson to have you stop sending lamps except at the same price as we do in France, which of course would stop all American, as there are extra expenses incurred on yours.- This letter no doubt will be couched in pretty nice terms, but if you accede to it you will never sell another lamp in Europe. ~~+~~

The next thing touched was the models you sent to Germany, of dynamos - It seems after ~~you~~ sending them two you wrote them a letter saying you intended to change from 2 to one magnet thus changing their models, this was the cause of a perfect torrent of wrath which I took manfully

Yours truly

"Batch"

"I have asked them to put an engineer in the Isolated business in my place" If they dont arrange quick to make a long talked of Central Station here I shall be home soon"

Cie CONTINENTALE EDISON
SOCIÉTÉ ANONYME
Au Capital de 1 million de francs

EXPOSITION INTERNATIONALE D'ÉLECTRICITÉ
Paris 1881
GRAND DIPLOME D'HONNEUR

ADRESSE TÉLÉGRAPHIQUE
EDISON, PARIS

Paris, le 2 Novembre 1883

33, Avenue de l'Opéra

Have no time to show this to Dyer

Take Observer Use it is impossible to see your letter we learn our people many of them Germany

Thomas Alva Edison Esqre.

New York.

Dear Sir, Let me see your answer to the letter

We wrote to you on the 22nd Ult° & wired to you yesterday as follows

"Vital importance send immediate first "class man like Hennis who knows Porter "and Armington machines, answer quick, "also when will send answer Swan Suits "every days delay dangerous "Edison"

We are expecting your answer & hope your defence against Swan has already left New York as we require same very urgently.

The Austrians have granted us the necessary time & for our Vienna suit it would be sufficient if we had your defence here for the 25th of this month, but the German patent office to grant any longer delay & if we lay of a few weeks, it will only be the greatest difficulty.

Referring to Major Dyers letter

of the 30th Augte, our board of Directors has decided to drop Set 16 as the manufacturing of sockets therein described is of no great importance, also France Set 30.

On the other hand we would like to know why you do not seem to believe that Set 7 can be held. Mr Batchelor considers principally Claim 1. "a rotating armature composed of thin metal plates &c &c ..... to be important. & we will therefore keep that set for a while & until we hear from you that it can't be held.

Set 34. We will also still keep as that armature may be of importance.

Set 55. we keep in France & Belgium as it will be necessary to work arc & incandescent lamps on the same system.

The way of transmitting electricity described in sets 42 & 44 is likewise important & we have decided to keep these sets at least for another year.

We are

Dear Sir

Yours Sincerely

COMPAGNIE CONTINENTALE EDISON

J. R. Wall

Administ. Délégué

1883-11-04

SOCIÉTÉ INDUS^elle & COMM^le EDISON

Société Anonyme. Capital : 1.500.000 Francs.

à Ivry s/ Seine. 5, Rue du Parc.

Grand Diplôme d'honneur PARIS 1881

Ivry, le 188

I think well of

Nov 4 1883.

My dear Insull

1000 you telegram were amiss

on original stock Haberg asks me I should not like to sell that.

Can you sell for me the Isolated Stock I had from factory or is that to be locked up? I must have some money from somewhere for it is such an infernally expensive business living here that I am completely busted —

I had Bailey telegraph for a man well used to Porter & Armington Engines — Don't fail to send this man immediately as I have taken one of your Porter engines from Milan & my Armington engine for the Nice exposition and we have not a man

2

1883-11-04

SOCIÉTÉ INDUS^elle & COMM^le EDISON

Société Anonyme. Capital : 1.500.000 Francs.

à Ivry s/ Seine. 5, Rue du Parc.

Grand Diplôme d'honneur PARIS 1881

Ivry, le 188

in all France that ever saw one; if you do not do this for me I am very much afraid I shall have a failure — I have found out the reason why Armington never came near me about the engine — they sent me the patterns & when Cunningham was making it, Armington came over one day and told Cunningham to make the regulator different to the patterns, so the engine was made so and after weeks of experiment I have found out that he told Cunningham wrong & I have had to change it again — I have had to endure all kinds of blackguarding on this engine because it in the first place cost so much and then I had never done experimenting on it and I feel in

1883-11-04

SOCIÉTÉ INDUS^elle & COMM^le EDISON

Société Anonyme. Capital : 1.500.000 Francs.

à Ivry s/ Seine. 5. Rue du Parc.

Grand Diplôme d'honneur PARIS 1881

3

Ivry, le 188

Mr Pleasant word with the Armington people for neglecting me thus. Between you and I I don't think Armington knows much about his engine. If the other Porter had not been broken I should have taken that also for nice. A short time ago I was highly complimented on the Brussels theatre which as the Burgomaster said had not given a minute trouble since it was put in —

I have occasionally to endure a fearful raking down in our board meetings from friend Forges one of these occurred last wednesday the cause of the wrath being the fact that Edison was selling lamps to Germany for such low prices and ~~the other~~ Edison had sent only two models of dynamos to Germany.

1883-11-04

SOCIÉTÉ INDUS^elle & COMM^le EDISON

Société Anonyme. Capital : 1.500.000 Francs.

à Ivry s/ Seine. 5. Rue du Parc.

Grand Diplôme d'honneur PARIS 1881

4

Ivry, le 188

He was so abusive that after the meeting I called him on one side & gave him my resignation but of course the rest of the board would not hear of it & have written me a very nice letter. What are you doing at Goerck St & what models have you got out. Ask Edison what he thinks of a thousand lamp machine with a wire armature.

Yours

Batchelor

— Don't forget the man for Porter engine & see my stock —

1883-11-05

J. No. 6526 DEUTSCHE EDISON GESELLSCHAFT
FÜR ANGEWANDTE ELEKTRICITÄT.

INTERNATIONALE ELEKTRISCHE AUSSTELLUNG
GROSSES EHREN-DIPLOM
Paris 1881.

TELEGRAMM-ADRESSE:
Edison Berlin.

Reichsbank Giro-Conto.

BERLIN W.,
98 Leipziger Strasse.

Insulb. = I remember distinctly this telegram. 5th November 1883
It never got to Bergmann

Thos. Alva Edison Esq

New York

Dear Sir

We duly received your sundry favors of the 12th Sept and 10th and 12th October last contents of which we duly noted.

Our Bankers having paid you $9000 on receiving telegraphic instructions, have now received further orders, to pay the remaining $500, by letter as we did not think it worth while to cable for so small an object.

On the 31st Oct. we telegraphed you as follows: "Have meters left, reply cable" to which we received your telegram: "No orders for meters".

We are much astonished at this as Mr Hammer assures us having sent you some weeks ago an order for meters. While writing

your explanation of this circumstance, and being much in want of some meters, we telegraphed you to-day as follows:

"Send immediate ~~ten~~ hundred light
"two fifty two twenty ~~meters~~ complete
"also ten shunts for hundred."

and beg to confirm this order for

10 hundred light meters
2 fifty do do
2 twenty five do do
10 shunts for hundred light meters.

Trusting you will be able to attend to this small order at once, we remain

Dear Sir

Yours faithfully

DEUTSCHE EDISON GESELLSCHAFT
FÜR ANGEWANDTE ELEKTRICITÄT.

Hugo Fischer

Copirt.

Received Oct 5th 1883

Urban Bay

[FROM JOSHUA FRANKLIN BAILEY]

Form No. 4. 1883-11-14

CABLE MESSAGE.

THE WESTERN UNION TELEGRAPH COMPANY.

All CABLE MESSAGES received for transmission must be written on the Message Blanks provided by this Company for that purpose, under and subject to the conditions printed thereon, and on the back hereof, which conditions have been agreed to by the sender of the following message.

THOS. T. ECKERT, General Manager. NORVIN GREEN, President.

NUMBER	SENT BY	REC'D BY	CHECK
243	Co	W	8 Paris

Received at 254 Broadway Nov 14 1883.

To Edison ny 65 — 5 ave.

Answer about german lamp factory

E. Meredith

1883-11-16

Exch.e $1000 00/100

PARIS, November sixteenth 1883

Three days after sight of this FIRST of Exchange (second unpaid)

Pay to the order of Drexel Morgan & Co

One thousand dollars

for Value received and charge to account of Chas Batchelor

To M. Thos. A Edison New York.

Chas Batchelor

No.

Accepted Nov 19 1883 Drexel Morgan & Co

D. M. & Co.

1883-11-16

J. No. 7430. **DEUTSCHE EDISON GESELLSCHAFT**

FÜR ANGEWANDTE ELEKTRICITÄT.

INTERNATIONALE ELEKTRISCHE AUSSTELLUNG
GROSSES EHREN-DIPLOM
Paris 1881.

TELEGRAMM-ADRESSE:
Edison Berlin.

Reichsbank Giro-Conto.

BERLIN W., den 16th Novbr 1883
96 Leipziger Strasse.

Thomas Alva Edison Esq
New York

Dear Sir

We last had this pleasure on the 5th Inst and in reply to our cablegram of the 7th Inst.

"Cable when Armington machine left"

we received your reply:

"Engine shipped Monn to-day,"

at which we were much disappointed, since we had imagined it to be on the road for some time.

Owing to some very damaging reports in the newspapers, stating that you had lost a patent case on your incandescent lamp on the 8th October in favor of Sawyer & Man, about the existence of which we had been kept in

entire ignorance, we cabled you as follows:

"Great excitement because newspapers state that incandescent lamp lawsuit is decided against you in favour Sawyer Cable whether true."—

Topic in reply to a telegraphic inquiry also wired us: "No particulars about lawsuit Washington cabling Newyork."

To our cablegram to you we received your reply on the 14th Inst.

"Not true case still before secretary interior only covers minor details process manufacture of which under the existing aggravating circumstances we made the best we could by interpreting it as much to our favour as possible in order to appease the mind of the public.

For our own information however we interpreted the cablegram to that effect, that what the papers had stated was substantially correct: you had lost the case and

appealed

1883-11-16

DEUTSCHE EDISON GESELLSCHAFT
FÜR ANGEWANDTE ELEKTRICITÄT.

appealed to the Secretary of the Interior to have the decision of the lower Court reversed.

We should be pleased to hear from you that this our interpretation was wrong and that in reality you had not lost the case in the lower court.

But we must confess, and we have also written to our Paris friends, that we are very much disappointed at the manner in which you try to pass over so very important a question. If on your side matters of such vast importance to our success and yours are not considered worth mentioning even to your representatives on this side, we cannot help but seeing in such proceeding on your part a moment of great weakness of your cause which we have made <u>our own</u>!

The entire matter could not possibly have happened at a more inopportune time

time

4

time owing to the different lawsuits now pending and it will not surprise you to hear that the opposite party at once pounced upon the newspaper article in question and made the best of it in their favour.

We are still without a reply to our letter of the 13th Octob. last in which we placed several matters of importance before you above all the question of dynamo machine.

Trusting that your reply to the above mentioned letter may be on the way by this time,

We remain

Yours faithfully

DEUTSCHE EDISON GESELLSCHAFT
FÜR ANGEWANDTE ELEKTRICITÄT.

E Rathenau Hugo Pöschon

Copirt

Nov 16/88

Deutsche Ed Ges
re the Sawyer
Mann Patent

1883-11-19

SOCIÉTÉ ÉLECTRIQUE EDISON
SOCIÉTÉ ANONYME
Au Capital de 1 million de francs

EXPOSITION INTERNATIONALE D'ÉLECTRICITÉ
Paris 1881
GRAND DIPLOME D'HONNEUR

ADRESSE TÉLÉGRAPHIQUE
EDISON, PARIS

Paris, le _____ 188

33, Avenue de l'Opéra

19 Nov 1883.

My dear Insul —

Yours of Nov 5th to hand. I did not know of the increase of the Edison Electric Light Co Stock. I suppose they will have called on me to pay up the increase eh? I have received no notification whatever on the subject. As Edison has told me to draw for 5000 on him I think it best for me to hold out till you come over here — Am glad to hear your journey extends to Paris, depend upon it you will not regret coming here, we will try and make it agreeable for you — Glad to hear Machine Works is no worse — Lamp Factory & Bergman seem to be flourishing — Many thanks for letter — Good bye till I see you at Paris.

Yours Batchelor

1883. 11-22

G

COMITATO
PER LE APPLICAZIONI DELL' ELETTRICITÀ
« SISTEMA EDISON » IN ITALIA

Via Manzoni, 12 A

Indirizzo per Telegrammi
EDISON - MILANO

MILANO, 22d Nov 1883

Th. A. Edison Esq. — New York

Dear Sir

The Richard's Indicator that I have used for our engines is little fitted for their high speed; and therefore upon Mr Lieb's suggestion, I beg to transmit you order for a Tabor's Indicator, such as you use for your Central Station. I shall feel obliged if you will take care that the Indicator be shipped well packed and as soon as possible. At the same time Mr Lieb should like to have a supply for 4 Engines, and for say six months, of such packing for the piston rods of the Armington and Sims engines, as you use for the same engines in your Station, and precisely the same packing that you have found to be the best for them. We have in fact a great difficulty in getting suitable stuffing box packing for our engines.

Our Station proceeds very well. We still go with 1200 lamps, because I will not increase the lamps before being sure of having everything ready for the Theatre of the Scala, which opens on the 26th December. We go on very fast in wiring the theatre, laying down the feeders

2

1883-11-22

COMITATO

PER LE APPLICAZIONI DELL' ELETTRICITÀ

« SISTEMA EDISON » IN ITALIA

Via Manzoni, 12 A

Indirizzo per Telegrammi
EDISON - MILANO

MILANO, ... 188.....

and fitting up the machines in our Station, so that I have no doubt to be in time; we have even begun to light a part of the service rooms of the Theatre yesterday night. When complete, the lighting of the Theatre will require 2450 lamps, but on the 26th December, only 2000 will be lighted. — The Theatre Manzoni is lighted every evening since last September.

Please to inform me about the Indicator and the packing referred to in this letter, at your earliest convenience

I remain dear Sir

Yours truly

COMITATO PER LE APPLICAZIONI DELL' ELETTRICITÀ
SISTEMA EDISON, IN ITALIA

G. Colombo

1883-11-25

SOCIÉTÉ INDUS^elle & COMM^le EDISON

Société Anonyme. Capital : 1.500.000 Francs.

à Ivry S/ Seine, 5, Rue du Parc.

Grand Diplôme d'Honneur PARIS 1881

Ivry, le Nov 25 1883

My dear Insull

Will you please bring with you statement of lamp factory machine works & my account with Edison

You must give us a few days here as I want to show you round & show you what we have done

Yours

Batchelor

1883-01-29.

S. No. 941.

DEUTSCHE EDISON GESELLSCHAFT
FÜR ANGEWANDTE ELEKTRICITÄT.

INTERNATIONALE ELEKTRISCHE AUSSTELLUNG
GROSSES EHREN-DIPLOM
Paris 1881.

TELEGRAMM-ADRESSE:
Edison Berlin.

Reichsbank Giro-Conto.

BERLIN W., den 29. November 1883.
96 Leipziger Strasse.

Herrn T. A. Edison
New York
65 Fifth Avenue

Zur Zeit Ihrer Erfindung v. 15.e
erkennen wir Sie Ihrer Tantieme gr.
nicht

mit Dollars 1918.40

und weisen heute die Herren Gebrüder
Siebrecht in Frankfurt a/M. an, Ihnen
diesen Betrag baar auszuzahlen zu lassen.
Wir bitten um gefl. Empfangnahme
und empfehlen uns Ihnen
hochachtungsvoll!

DEUTSCHE EDISON GESELLSCHAFT
FÜR ANGEWANDTE ELEKTRICITÄT.
Hallmann pp. Schwarz

Copirt.

(1883)

Cie CONTINENTALE EDISON
SOCIÉTÉ ANONYME
Au Capital de 1 Million de Francs

Exposition Internationale d'Électricité
PARIS 1881
Grand Diplome d'Honneur.

Adresse Telegraphique:
EDISON, PARIS.

Paris, le 30 Novembre 1883

8, Rue de Caumartin.

Edison Electric Light Coy of Europe
New York

re. "Cost price of lamps"

Gentlemen,

We beg to enclose translation of a letter we just received from the German Edison Coy at Berlin, concerning the royalty on incandescent lamps to be paid to the said Company by Messrs Siemens & Halske.

We also enclose for your guidance a copy of the articles of the contract referred to in that letter & must ask you to be kind enough to let us know at your earliest convenience (for the purpose mentioned in the letter of the Edison Coy at Berlin) your present "cost price" in N. Y. of the Edison incandescent lamps (A & B lamps)

Yours very sincerely

President du Conseil d'Adon

[TRANSLATION FOLLOWS]

1883-12-03

J. No. 8410

DEUTSCHE EDISON GESELLSCHAFT
FÜR ANGEWANDTE ELEKTRICITÄT.

INTERNATIONALE ELEKTRISCHE AUSSTELLUNG
GROSSES EHREN-DIPLOM
Paris 1881.

TELEGRAMM-ADRESSE:
Edison Berlin.

Reichsbank Giro-Conto.

BERLIN W.,
96 Leipziger Strasse.

[redacted]

Herrn Thomas Alva Edison,

New-York.

Wir besitzen Ihr geehrtes Schreiben vom 2o ten vorigen und erkennen Sie für den Betrag Ihrer Rechnung über

1 Maschine a.5o.L.

1 " " " a.25.L.

laut Aufgabe mit Dolls.425.-- die wir Ihnen prompt remittiren.

Gleichzeitig bitten wir Sie uns gefl.möglichst umgehend zu sagen, zu welchem äussersten Preis Sie uns jene Maschinen frei Bord New-York liefern können, wenn wir von jeder Sorte gleichzeitig einen grossen Posten -/25 Stück/bestellen; Sie wissen, dass die Preise, die Sie uns aufgeben, für die Herren Siemens &. Halske massgebend sind, und bitten wir Sie deshalb möglichst scharf zu calculiren und uns billigste Preise zu stellen.

Wir begrüssen Sie

Hochachtend
DEUTSCHE EDISON GESELLSCHAFT
FÜR ANGEWANDTE ELEKTRICITÄT.

Cpplrt.

[TRANSLATION]

1883-12-03

Dec 3rd 1883

Mr T. A. Edison N.Y.

We received your letter of the 20th Nov. and credit you the amount of your bill about 1 Dynamo for 50 lights
1 " " 25 "
with $ 425 which we remit you punctually.

We request you to tell us immediatly, if you please, at which lowest price you can give us those engines f.o.b. New York if we order 25 of each of both kinds at once.

You know that the prices you give us are as intended for Mess. Siemens & Halske.

Therefore please make your calculation as closed and your price as low as possible.

Respectfully yours

Deutsche Edison-Gesellschaft

E

Our Co here have stopped selling 25 Light machines as they find it does not pay to send a man a great distance & stay there sometime = The 50 light is the lowest they sell. we are not going to make any more 25 light we quote 50 light

[ATTACHMENT]

1883-12-10

J. No. 8403. **DEUTSCHE EDISON GESELLSCHAFT**
FÜR ANGEWANDTE ELEKTRICITÄT.

INTERNATIONALE ELEKTRISCHE AUSSTELLUNG
GROSSES EHREN-DIPLOM
Paris 1881.

TELEGRAMM-ADRESSE:
Edison Berlin.

Reichsbank Giro-Conto.

BERLIN W.,
96 Leipziger Strasse.

[redacted]

[redacted]

[redacted]

Wir empfingen Ihr Geehrtes vom 23 ten vor.Mts.und haben vom Inhalt desselben Kenntniss genommen.

Wir wollen hoffen,dass die qu.Meters bereits auf dem Wege nach hier sind,da wir dieselben dringendst gebrauchen und zeichnen

Hochachtend
DEUTSCHE EDISON GESELLSCHAFT
FÜR ANGEWANDTE ELEKTRICITÄT.
[illegible]

We got your letter of Nov 23 and note contents
We hope that the meters are already shipped as we need them quite necessary

Copirt.

1883-12-09

1883

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON
Société Anonyme, Capital : 1.500.000 Francs
D'ELECTRICITÉ
Grand Diplôme d'honneur PARIS 1881
Ivry-sur-Seine, le 5, RUE DU PARC.

Mr Gaster pls return

Dec 9th 1883.

Thos. A. Edison Esq New York

My dear Edison,

Have just read Bailey's letter to Eaton of 8th Dec. I agree with him in principle that no large capital can be enlisted in our enterprise here whilst there are restrictions on its actions and there is no doubt the entire control must be held here by these people. The question is, what do you get in return for giving up your right?

1st You do not have to pay back the £000,000 &c. and therefore the founders shares would have an immediate value

2 Royalty on the lamp coming direct to the founders shares

The royalty on the lamp I think is a big thing; but the percentage of profits I think is worth very little, there are so many ways of making no large profits, & these jews are so keen that it is doubtfull in my mind if we get anything from that in 10 years

The telephone here with large capital & magnificent business have never paid a dividend

I believe Borges will give a great deal to get the control because I have talked with him a few times and if I were you I would ask:-

1st An advance Royalty in no case to be paid back-

2. Whenever a contract is made (like the German or Italian where money is paid in) a certain percentage of that money should go direct to the founders shares.

Very truly yours

Chas Batchelor

1883-12-11

SOCIÉTÉ ÉLECTRIQUE EDISON
SOCIÉTÉ ANONYME
Au Capital de 1 million de francs

EXPOSITION INTERNATIONALE D'ÉLECTRICITÉ
Paris 1881
GRAND DIPLOME D'HONNEUR

ADRESSE TÉLÉGRAPHIQUE
EDISON, PARIS

33, Avenue de l'Opéra

Paris, le Dec. 11th 1883.

Mr Th. A. Edison
New York.

Dear Sir,

We beg to request you to have shipped to the Deutsche Edison Gesellschaft, 96. Leipziger Str., of Berlin as quickly as possible the following material.

2 machines for scraping fibres down to gauge after the finishing mould.
1 standardizing machine complete for sizeing fibres by spot of light
1 mercury screw pump
300 mercury cocks with half dozen taps for spare
1 machine for drying lamps with air-pump complete
1000 carbon forms for A.16.
800 " " " B.8.
400 " " " A.10.
400 " " " A.32.
1000 Rubber corks assorted holes
2 Mahogany platting boxes as samples
1 full set of burners for glassblowing
2 tweezers for inside parts

1883-12-11.

Kindly send your invoice for this order to us and acknowledge receipt of our present by return of post.

We remain

Yours very truly.

[illegible]

E. L. Italy

1883-12-14

64/10

COMITATO

PER LE APPLICAZIONI DELL'ELETTRICITÀ

« SISTEMA EDISON » IN ITALIA

Via Manzoni, 12 A

Indirizzo per Telegrammi
EDISON - MILANO

MILANO, 14th Dec 1883

Th. A. Edison Esq.
New York

Dear Sir

We are duly in receipt of your fav. of 21st and 30th ult.

We thank you for details of new machines. Hoping to give you larger orders for same in a short time, we give you order now of:

One Dynamo G (25 lamps)
{ One Dynamo R (50 lamps)

which you will ship as early as possible advising us when put on board.

We will return the 500 jackets to Bergmann & Co with the required notification for the Custom House, as the discount offered is not sufficient to compensate their rough appearance. You will please to credit us of their amount, when returned.

Mr Insull, when he will come, will find that almost all the accounts are completely settled, as we have cabled you some time ago. We hope that the Paris Coy have informed you in due time of this settlement, and are surprized to hear you speak of claims.

There are only two questions open yet: that of one Porter-engine, and that of 4 feeder-regulators. For the Porter-engine, we must add that we have found the crank pin cracked and therefore altogether unfit for work; but if you could substitute the damaged crank-shaft with a new one, we may perhaps consent to keep the engine, to be used for the seventh Dynamo. As to the feeder-regulators, we have not used them and will probably never find the use of them.

We confirm you our letter of the 22d ult. ordering some packing for stuffing-box of Armington engines and a Tabor indicator.

We confirm also the following telegram sent ~~yes~~ day before-yesterday and repeated to-day:

"Cable when balance order lamps shipped, Command other 2000 A 1000 B 102 Volts 1000 C not above 107"

With this Cable we intended to ask you whether and when you have shipped the 1200 lamps to balance the 4000 ordered by us with our Cable of 6th ult. Moreover, we give you order for:

2000 lamps A, of about 102 Volts
1000 " B " " 51 "

1000 C-lamps.

We do not know if you use C-lamps, although we infer it by your statement of dynamos. We have some C-lamps of high EMF, say 107 to 11½ Volts that we find useful; therefore we beg you to send the C-lamps of an electromotive force not above 107 volts, although for us it would be more convenient to fix our standard EMF at 102 Volts for all lamps. If you think that using C-lamps of 102 Volts is equally convenient from the point of view of durability and economy of power, you may send all the C-lamps of 102 Volts.

You will oblige us by sending back to us any of our cables that is unintelligible; otherwise the Telegraph-Board will not compensate us of the expense of repeating it. Please to do this not only in future but also for the last 2, or 3 cables that we have been obliged to repeat.

Awaiting your earliest reply we remain dear Sir

COMITATO PER LE APPLICAZIONI DELL'ELETTRICITÀ
SISTEMA EDISON, IN ITALIA

[illegible]

Dec 18

Thos A Edison

Received telegram as follows:—

"Dec 8. Prepare yourself return immense town building thirteen central stations result returns Newyork station which netted over five thousand November."

"Dec 15. Talk with Insull fully about European company affairs introduce him Porges."

Yours
"Batch"

883-12(28)

[TRANSLATION FOLLOWS]

1883-12-18.

INSTALLATIONS D'ÉCLAIRAGE ÉLECTRIQUE
Système Edison
SEUL DIPLÔME D'HONNEUR
pour l'éclairage Electrique par Incandescence
EXPOSITION INTERNATIONALE D'ÉLECTRICITÉ
PARIS 1881
SEULE MÉDAILLE D'OR
pour Système complet d'Eclairage Electrique
· EXPOSITION ·
· INTERNATIONALE D'ÉLECTRICITÉ ·
AU PALAIS DE CRISTAL
LONDRES 1882
INSTALLATIONS
DE
Transmissions de Force motrice stationnaire par l'électricité.
LAMPES EDISON
MACHINES ÉLECTRO DYNAMIQUES
de toutes dimensions.
ACCESSOIRES
de tous genres p.r installations
D'ÉCLAIRAGE ÉLECTRIQUE

Adresse Télégraphique ÉLECTRICITÉ, Genève.

Société d'Appareillage Electrique

8 · Boulevard du Théâtre · 8

GENÈVE

Genève, le 18 Décembre 1883

Monsieur Th. A. Edison
65 Fifth Avenue, New-York.

Monsieur

Nous avons bien reçu votre honorée lettre du 21 Novembre dernier, qui nous indiquait les prix, F.O.B. New-York City, de vos nouveaux types de machines dynamos, et vous remercions vivement de ce renseignement.

Pour aujourd'hui nous venons vous faire la commande de : 1 machine dynamo G de 25 lampes 16 cp.
et de : 1 d° d° R de 50 d° d°.
avec 2 paires de balais de rechange pour chacune d'elle.

Aux termes de votre lettre nous pensons que vous pourrez nous faire l'expédition aussitôt après réception de la présente lettre. Si cela ne doit pas retarder l'expédition, nous commandons en plus pour chacune des deux machines une armature de rechange.

Veuillez, Monsieur, agréer l'assurance de toute notre considération

Vos sincèrement dévoués

SOCIÉTÉ D'APPAREILLAGE ÉLECTRIQUE
A GENÈVE
l'adm.r délégué
A. Richard

P.S. Chaque machine devra avoir un régulateur de résistance.

Prière de nous faire connaître les poids des machines dynamos. Nous ne connaissons le poids que de H seul.

[TRANSLATION]

1883-12-18

Form L. 2000-12-7-'83.

THOMAS A. EDISON,
Central Station, Construction Dep't,
No. 65 FIFTH AVENUE,

Société D'Appareillage Electrique
8 Boulevard du Théâtre.

~~New York,~~ 188

Translation.

Geneva, 18th December 1883.

Mr. Thomas A. Edison,
65 Fifth Ave. N.Y.

Sir: We duly received your favor of 21st inst., giving price f.o.b. New York, of your new Dynamos, & we thank you very much for the information:-

To-day we ship you the following order:-

1 - G machine 25 lamps c 16 c.p.
1 - R " 50 " c 16 c.p.

with two extra pair of brushes for each machine.-

According to the terms of your letter, we suppose you can ship these dynamos immediately upon receipt of the present.- If it does not delay the shipment we would like to have an extra armature for each machine.-

We remain &c. Very truly yours -
"Société d'Appareillage Electrique"
à Genève -

P.S. Each machine must have a resistance box - Please give us weights of the Dynamos; we only have weight of the H machine.

1883-12-23

SOCIÉTÉ ÉLECTRIQUE EDISON
SOCIÉTÉ ANONYME
Au Capital de 1 million de francs

EXPOSITION INTERNATIONALE D'ÉLECTRICITÉ
Paris 1881
GRAND DIPLOME D'HONNEUR

ADRESSE TÉLÉGRAPHIQUE
EDISON, PARIS

Paris, le Dec. 23d. 1883

33, Avenue de l'Opéra

Mr. Thomas A. Edison
65 Fifth Avenue
New York

Dear Sir,

Will you please ship soon-
est possible to our Antwerp Depot
1 Standard Tremoine Indicator
No 259. of Catalogue Bergmann
and oblige

Yours very truly,
SOCIÉTÉ ÉLECTRIQUE EDISON

ADMINISTRATEUR DÉLÉGUÉ

If this "old style" lamp
sender, but write say
that we find these indicators
unreliable & ship another
style, when ready to ship
have Sprague write a description
how to set it & have
Lamp factory send
1/2 doz lamps
pkd by Lamp f
with it &

1883-12-25

SOCIÉTÉ INDUS^elle & COMM^le EDISON

Société Anonyme. Capital: 1.500.000 Francs.

à Ivry s/ Seine. 5. Rue du Parc.

Grand Diplôme d'honneur PARIS 1881

Ivry, le 188

Dec 25th 1883

My dear Edison,

I give you a few more points on the proposed new company as I understand them from Mr Bailey as I am never requested to attend the meetings in reference to such things I can only give you my opinion on what Bailey likes to tell me —

I should advise very strongly never sending powers till you have heard all the points. In Mr Baileys letter of Dec 8th he said that he and I together would send a joint telegram asking for powers to be sent which should not be used except on terms laid out in that letter but I refused to do any such thing and the changes that are to day made as I relate them below justifies what I did —

The proposition as told me by Bailey is as follows:-

There shall be a royalty on all lamps manufactured or sold of 25 centimes coming to the founders shares.

40% of the profits of the company after certain deductions shall come to the founders shares

Now these founders shares shall be divided as follows:-

19 parts to the Edison Elec Light Co of Europe
5 " to the Swan
16 " to the parts of founder (old) {that are held here, the Syndicate & the bank.

∴ $\frac{19}{40}$ (of the royalty + 40% of profits) will come directly to the Light Co of Europe

They propose to take all the companies over at par and give them fully paid up shares — They raise the capital to £10,000,000 but only pay up cash for half

the difference between the £3,500,000 of the present companies & the 10,000,000 therefore the actual cash capital wants be 3,500,000 in present companies
3,250,000 shares half paid
£6,750,000

The profits of this company are to be divided as follows:—
5% of profit for legal reserve
then 6% dividend to paid up capital
then 11% of total profits to board of directors
then 10% of total profits to a fund for amortising the total capital
then what is left is divided
40% to the founders shares
60% to supplementary dividend to stock

As regards this division of profits I would remark that the 11% to board of directors seems to me very high especially as the board receive here something for sitting which is called "jetons de presence"

and although during the last two years this has been used up in other ways & the directors have received nothing in the new statutes Mr Bailey says they propose to increase this by £40,000—
The 10% as a fund for amortisement is drôle, after Bailey has told you that the capital of the Societé Electrique & Compagnie Continentale will not have to be paid he brings forward this amortisement with perfect equanimity; from this you see that you not only have to pay back the Compania Continentale & Societe Electrique but also the Societé Industrielle & the rest of capital, but it would take perhaps 15 years instead of right off—
I think myself that the amortisement of the capital is a good thing in the long run as it reduces the 6% to capital

making them deferred shares in time but also putting further back the actual value of our Edison Electric Light Share.

You notice these percentages are of the total profits now after these come 40% of the rest to the founders shares ——

I will suppose a condition such as will probably be actually the case in two year time if we work hard.

— Capital paid up Frs. 6,750,000
400,000 lamps sold per year
profit 20% on paid up capital.

Profit — 20% of Frs. 6,750,000	Frs. 1,350,000
Legal reserve. 5% —	67,500
	1,282,500
6% to Capital paid up	405,000
	877,500
11% total profits to the Board of directors	148,500
	729,000

over —

carried over	729,000
10% to a fund for amortisement of Capital	135,000
	594,000

Of this 40% to Founders
60% to supplementary dividend

Founder shares then would receive

40% of Frs. 594,000 =	Frs. 237,600
+ 400,000 lamps at 25c	100,000
	Frs. 337,600

Now $\frac{19}{40}$ of this will come to the Edison Electric Light Co of Europe (Limited) which is Frs. 160,360 or $31,150

This would be a dividend for the European shares of 1½% or if capitalized at 6 per cent the European share would be worth $26 per share —

W. Bailey says it is necessary to put powers of vote in hands of the European Co of New York

into the hands of a vote of the Stock-holders but this is not absolutely necessary for from an interview which I & Insull had with Porges he stated distinctly that all he wanted was that the European Light Co should keep some person here whom it could trust, & to whom it would give a power of attorney to act immediately; & thus a point that he wishes to have settled immediately can be decided in a few hours instead of waiting a month

He even went so far as to suggest that Drexel Harjes & Co might be people whom the European Co could trust especially as they held as much interest in the companies as both Porges and his bank together

Certainly such a power never ought to be given to Bailey as in my opinion he cannot get

certainly do the Co justice — In my opinion he owes a great deal of money to Leon — He told me the other day that he was in a fix and Leon & Lebey had guaranteed to arrange for him to borrow another $25,000 to help him over, he did not say what return he gave for this — I know he has tried to borrow money from Porges — I delivered almost all the founders shares that I had to deliver to Pukas & Bailey & which were Bailey's part to persons having his order to receive them this showing that he must have borrowed much money on them — Porges says he spends large amounts per year besides his salary in travelling around Europe unnecessarily — Finally I think a man so tied up to these people, is completely bound to them to get his daily bread, cannot get the best con-

ditions for his employer the Edison Electric Light Co of Europe

In my opinion these people especially Porges who I have talked with a great deal would give anything to have the control that is now exercised by the Light Co, in Paris where it can be consulted at a minutes notice. For this they were willing to give the Light Co 25% royalty on lamps, forego the payment of the $2,000,000 of capital and give 40% profit in a new company of 6,750,000 paid up capital—

What does Bailey bring us? A company which not only pays back the 2,000,000 but also pays back the whole total

A company in which the board of directors gets as much as the total coming to the Light Co —

A Company in which the Light Co gets 8½ per cent of the total profits

In fact a company which in two years if they did as good a business as I have shown would make the Light Co. stock worth $25

Yours 'Batchelr'

— Insul reads this and sends it on from London —— C.B.

After working nearly 3 years and not receiving enough to board me you will not wonder that I would sooner come over there when the prospect of working two or three years more to make my stock worth $25 stares me in the face

Yours C.B.

1883-12-26

Memorandum

SOCIÉTÉ ÉLECTRIQUE EDISON

Société Anonyme Capital 1 million de francs

33, Avenue de l'Opéra

PARIS, le [illegible]

M. [illegible]

Bailey showed me a copy of the ~~key~~ contract he was reading to us on Sunday and I find the part to E.E.L. Co. of E. is given a little less being about 21.5 - 40 lbs instead of 24 - 40 lbs. Had a long talk with Porges today & he asked me whether I had decided and I told him that I had about decided to go to the States for a month & then come back for about it month. But that is carefully going

on the contract they proposed I did not
think it would pay me to stop here at
all & we naturally had a "hell of a
time" —

Yours
R. Stebbins

Lamps

1883-12-29

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON.

Société Anonyme, Capital : 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ELECTRICITÉ
Grand Diplôme d'honneur
PARIS 1881

Ivry-sur-Seine, le 29 Decembre 83
5, RUE DU PARC.

1

T. A. Edison Esq.re
New York.

Dear Sir,

The object of the present is to obtain different particulars relative to the fabrication of lamps. Those particulars enable us to adapt our fabrication to the demands made, in a more satisfactory manner than hitherto.

Lamp A.1.6 cut 6" x 8 x 13/2

Our fabrication gives us lamps ranging from 98 to 112 volts in an average proportion of about 5% for each of these volts.

We would like to know whether you have a means of producing at pleasure lamps of a given kind, for instance whether you can get for one day's output 98 to 102 volt lamps and another day's output 102 to 106 f.e

Does this means consist in the carbonisation or in the measure of the carbons cold or else in the manner of heating the lamps whilst making the vacuum?

2. Lamps B? cut. 3" x 8 x 13/2.

We only get these lamps between 50 & 55 volts; they are consequently higher than the A 1.6;

This impossible to produce lamps ~~to~~ make a days run within 4 volts except by stating that it depends entirely on a chemical process in carbonisation & not entirely upon the manner of heating the lamps while making the vacuum

1883-12-29

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON.

Société Anonyme, Capital : 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ELECTRICITÉ
Grand Diplôme d'Honneur
PARIS 1881

Ivry-sur-Seine, le
5, RUE DU PARC.

b

comparatively and it is thus difficult for us to supply B lamps in a plant having A lamps of 94 volts; we would need B lamps of 47 volts and we only get a few per thousand.

What should be done to remedy this?

Lamps A.[1] cut 6½" × 8 × 13½.
" B.[2] cut 3¼"

For what reason have you abandoned the fibres cut 6" & 3" and adopted instead the 6½" & 3¼" sizes? Is the latter's economy better?

We have made some of these lamps and their life appears good but they are much higher volts than the 6" & 3". The average for the A's is from 110 to 120 volts; we cannot therefore continue to make them before knowing some means of reducing the volts. Please say how you succeed in doing so?

4. 10 Candle lamps cut 5"

Those lamps average good for volts but their life does not rise above 250 to 300 hours.

1883.12.29

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON.

Société Anonyme, Capital : 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ELECTRICITÉ

Grand Diplôme d'honneur

PARIS 1881

Ivry-sur-Seine, le

5, RUE DU PARC.

3

What can you say on this point?

5. 10 Candle lamps cut 6'.

Those lamps are so high in volts that we cannot make them. Why have you given up the 5' size and replaced it by the 6'? By what means do you reduce the volts?

6. 50 Candle lamps.

All the 50 Candle lamps we make are too high in volts; they range from 115 to 125. The life is very short, something like 100 hours! Can you give us any information about this?

7. 100 Candle lamps.

They have the same defects as the 50 candles in a higher degree. They are extremely high in volts and dont last long. The carbons often split in their entire length during the fabrication. The inside part breaks often where the platinum passes.

Can you give us any means of remedying those defects which render impossible the

1883-12-29

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ELECTRICITÉ
Grand Diplôme d'honneur
PARIS 1881

IVRY-sur-Seine, le
5, RUE DU PARC.

4

fabrication of certain lamps.

8. In terminating we would request you in general manner to inform us with the greatest detail of all the improvements in manufacture which your experience can suggest and principally on the following points.

by mirror gauge — Cut of bamboos. What are the means of verification?

Carbonisation. How long should the operation last and how must the temperature be conducted?

5 or 6 hours be careful about oxidation — Measure of carbons. What is the limit for each carbon over which they must not be used?

Vacuum pumps. How long does the operation last? How much mercury runs through each pump per minute?

2 to 3 hours according to skill of workers — 4 pounds per minute — no — Is there a means of doing the operation so as to bring the lamp near to a certain volt?

you can give him your percentage 15-20% is very good — Life Testing. What percentage is there of lamps of each volt? What is the average duration and the manner of increasing it? 600 hours. Care in every detail.

1883-12-29

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Ivry-sur-Seine, le

5, RUE DU PARC.

Thanking you in anticipation for the information you will kindly give us on the points above mentioned and which are of the greatest importance

Yours we remain,

Dear Sir

Yours faithfully

SOCIÉTÉ Indus^le et Comm^le EDISON

R. V. Picou

1883-12-31

Gebrüder Sulzbach

DEPESCHEN-ADRESSE

GEBSULZBACH - FRANKFURT-MAIN

Frankfurt a/M. 31 Dezbr. 1883.

Mr. H. A. Edson

65 Fifth Avenue

New York

Dear Sir

We beg to acknowledge the receipt of your telegram reading thus:

"Cable me quickly remainder hundred eighteen dollars placed daily you for me by German Exchange Company."

I regret very much the mistake occasioned by Mr. L. Speyer-Ellissen here, who had overlooked to instruct his New York Firm Messrs. Speyer & Co. to effect the payment.

Mr. Speyer-Ellissen having cabled immediately after the arrival of your telegram we have no doubt that the payment of $ 1917.40 will have taken place in the meantime.

We are, Dear Sir

Yours truly

Gebr. Sulzbach

Hornek, E. L. 1883-12-31

Mr Edison -

Batch's letter is the clearest we have ever had from there -

When you took Bailey two years ago, you know Fabbri said you did regret it - I guess F. had the best judgment abt that - Personally, I dont think Bailey

" 1883-12-31

reliable -

I suggest you cable for Insull + Batch. to agree on best terms with Porges they can get, + Insull bring them home for our prompt action here -

I dont think Bailey ought to hold our "power of atty" -

E

(Major Eaton)

GERMAN EDISON COMPANY

FOR APPLIED ELECTRICITY.

The general meeting shall order:

1. The following second addition to the statutes of the German Edison Company at Berlin.

ARTICLE 1.

In place of the paragraphs, numbered as below in the Statutes of the stock company with the firm name: German Edison Company for applied electricity, the following resolutions having numbers, corresponding to the numbers of the paragraphs, are substituted.

Section 2.

The Company has its Offices at Berlin; she can transfer them to some other place in Germany. She has a right, for the purpose of accomplishing her object, to establish Branch offices, sociétés en commandite, (companies with special partners) and Agencies at home and abroad, she can also participate as special partner or share holder in sociétés en commandite or as active partner in commercial companies and she can sign bonds or shares in sociétés en commandite or in stock companies.

Section 3.

The object of the Company is the practical application and working of electricity in all its branches but specially the practical application and working,

1. of the patents granted and in force or yet to

be granted to Mr. Thomas Alva Edison of New York, in the German Empire, the Empire of Russia and the Kingdom of Denmark, and which relate to the measurement, the division and application of Electricity for lighting and for transmission of power. Herein are included the patents for improvements or additional patents on these subjects.

2. of the patents granted or yet to be granted to Mr. Thomas Alva Edison of New York, on the same subject in other countries than the above named ones to the extent that the company should acquire the right to such working in the future. Concerning the working of the company the rules in paragraphs 35 and 35-a of the Statutes are in force.

Section 13.

In case of a liquidation the owners of certificates shall receive, in proportion to their share, 35 per cent of the amount of the settlement over the capital paid in. The fusion of the company with another is only allowed if, according to the Statutes of the new company formed by this union, the further existence of the certificates, with an extension of the rights of their owners (Paragr. 11 Sec.1) to the profits, that is to the surplus of the enterprise of the new company formed by the union, is guaranteed or if another arrangement satisfactory to all owners of certificates has been made.

Fusion without Consent of Corp. Cont.

Paragraph 31. Line 4 to the end.

A change of the object of the company or the dissolution of the company, except in the case when the dissolu-

tion is effected by the union of the company with another, cannot be ordered up to the 5 May 1893 without the consent of the Compagnie Continentale Edison at Paris or of her legal successors except under the conditions forseen in paragraph 4.

Furthermore the following rules of the Statutes cannot be changed without the consent of the Compagnie Continentale Edison or of her legal successors: paragraph 4--parg. 11-- first section of parg. 12-- parg. 13-- parg. 31 (as far as it treats of the necessity of the consent of the Compagnie Continentale Edison to certain resolutions made by the general convention,) parag. 33 (as far as it relates to the privileges of the owners of certificates;) finally the paragraphs 35 to 46 inclusively.

The admissibility of the union of the company with another is made under the supposition that the rights, according to the Statutes, of the Compagnie Continentale or of her legal successors are maintained.

Section 35.

The German Edison Company for applied electricity has purchased from the Compagnie Continentale Edison at Paris with the consent of Mr. Thomas Alva Edison and of the Edison Electric Light Company of Europe limited of New York and under the rules of article 209.b of the general German commercial laws (in the form of the edition of 11 June 1870) the rights, for the territory of the German Empire of the afore mentioned Electric Light Company, accruing from the pat-

ents of the inventions of Mr. Edison, and specially the following privileges.

1. The right to manufacture or to have manufactured all the machines, apparatus, tools and materials belonging to the Edison processes mentioned in paragraph 3, no matter if they are patented or not, also the right to get these objects from other places and to sell them but with the restriction that the Edison method for the manufacture of incandescent lamps cannot be made known by the company to a third party for the purpose of manufacturing without the special consent of the Compagnie Continentale.

2. The right to establish stations for purposes of lighting and transmission or to give the necessary permission therefore to others.

3. The right to use the objects mentioned under 1 and 2 for herself and to allow third parties to use them. Mr. Edison, the Electric Light Company and the Compagnie Continentale Edison do not give any other assurance than that of the actual existence of the patents.

The right of manufacture (under 1) extends to the machines, apparatus and tools necessary for electric railways but not to the use of the same.

The company is only limited in her workings and in her afore mentioned rights by the rights given to the firm of Siemens and Halske of Berlin in two contracts made the 13th of March 1883 between this firm on the first part and Mr. Edison, the Edison Electric Light Company, the Compagnie Continentale Edison and others, on the other part.

Correspondingly the rights settled in these two contracts on Mr. Edison, the Edison Electric Light Company and her legal successors are therefore also transferred to the German Edison Company.

As purchase price for the above described rights the company, from her capital, has paid in cash to the Compagnie Continentale Edison of Paris the sum of 350,000 Marks

There is p. p.

(insert to end of parag. 35)

Paragraph 35-a.

The German Edison Company for applied electricity purchases herewith from the Compagnie Continentale Edison, with the consent of Mr. Edison and of the Edison Electric Light Company, the same rights which according to parg. 35 are granted to her, for the territory of ther german Empire, also for the territories of the Empire of Russia and of the Kingdom of Denmark, to the extent that they are allowable and transferable to patent owners according to the laws in force in said countries.

As purchase price for the newly granted rights set forth in this paragraph the German Edison Company, from her capital, pays the cash sum of 50,000 Marks to the Compagnie Continentale Edison, the owner of the patent and inventor's rights of Mr. Edison and of the Edison Electric Light Company.

Section 36.

The Compagnie Continentale of Paris binds herself

to make known to the Company, and to her exclusively, all inventions on this subject patented and not patented, all improvements and results of experiments which she has on electric lighting and transmission of power or which she may yet get possession of up to 15 November 1886, and to do this for Germany, to the full extent of the processes mentioned in sec. 35, and to assist her in every way in the carrying on of her business in Germany so that she will be able to bring the manufacture to the same degree of technical perfection as the Compagnie Continentale herself.

The Company of Paris shall specially be bound to furnish to the company competent instructors at the latter company's expense. The German Edison Company is bound to reciprocate on all these points.

The German Edison Company at her expense shall have made out all those papers which are required for the formal transfer of the patent rights to her, according to the respective laws of the country. The Compagnie Continentale guarantees to furnish the necessary certificates of transfer and the powers of attorney of the present patent owners in the proper form and at the expense of the German Edison Company and from the time of the record of these papers in the commercial register, the Compagnie Continentale is free from all responsibility for the maintenance of all the patent rights transfered from her to the German Edison Company.

For the consideration of future patents, improvements and additional patents the german Edison Company has

to treat directly with Mr. Edison and the Electric Light Company without the intervention and responsibility of the Compagnie Continentale. In this respect also the German Edison Company has to bear the expenses for the granting and transfer of the patent right.

Section 38.

The Company on her part takes the obligation to see at her expense to the protection of the Edison patents under consideration with respect to the payment of the annuities and also to the working of these patents in the prescribed limits of time. If a law suit has been necessary for that purpose, arrangements for the settlement of the law suit may be taken independently by the company even if Mr. Edison or the Edison Electric Light Company should have made use of their right to interfere (paragr.37)

Section 40.

In the case of the dissolution of the company, specially in case of her liquidation the patent rights transferred to her, as far as they are still in force at the time, return without compensation to the Compagnie Continentale. An exception to this is the case of the union of the German Edison Company with another or the liquidation for the purpose of decreasing the original capital.

The patents transferred to the new company formed by the fusion shall also return to the Compagnie Continentale if this new Company should also dissolve while the said patents are still in force.

Section 41.

Besides the advantages laid down in paragraph 12 the German Edison Company is held to send every six months, after the balance of the accounts of the Company, the following remittances to the Compagnie Continentale Edison of Paris, which remittances shall be payable at the treasury of the latter Compagnie.

a. for every incandescent lamp used or sold within the German Empire by the German Edison Company or her licentiates or by the firm: Siemens and Halske on the strength of the agreement mentioned in paragraph 35, no matter where the so used or sold, incandescent lamps come from, and independently from their illuminating power, 16 2-3 per cent of the cost price at which the German Edison Company manufactures or purchases her lamps, but in no case more than 25 pennies (Pfennige) per piece. But the lamps which the firm: Siemens and Halske, on the strength of aforementioned agreement, and the lamps which the German Edison Company herself use in their own business and manufacturing establishments are free from this tax.

b. a tax for every light installation by incandescent lamps, established within the German Empire by the German Edison Company or her licentiates, or by the firm, Siemens and Halske, on the strength of a several times mentioned agreement: This tax is to be paid for every horse power actually expended for such incandescent lamps, the horse power being equal to 75 Kilogram Metres per second. To determine

the number of horse powers used in lamps we have to make use of the electric system of measurement; for the first 50 horse powers to be considered in an installation the tax will be 12 1-2 Marks per horse power, for every further horse power 16 Marks. For extraordinary installations which are transitorily put up this tax has not to be paid. In installations of mixed illumination (Incandescent and Arc Light) this tax is only paid for the horse powers spent for the incandescent lamps.

c. for every incandescent lamp used or sold by the German Edison Company or her licentiates Outside of the German Empire no matter where the lamps come from:

1. 15 pennies up to an illuminating power of 5 ordinary candles inclusively.

2. With an illuminating power of 6 ordinary candles and above-- 30 pennies, but in no case more than 25 per cent of the cost price at which the German Edison Company manufactures or buys her lamps at that time and in no case less than 12 1-2 pennies per lamp of the illuminating power of C-1 and 25 pennies per lamp of the illuminating power of C-2.

The lamps used in the business and manufacturing establishments of the German Edison Company are also free from the tax spoken of under c.

The taxes for the lamps and dynamo machines used and sold by the company herself are due at the end of the six months during which the respective lamps and dynamo machin-

es have been put in use or sold. For the lamps and machines used or sold by the firm: Siemens and Halske on the strength of a several times mentioned agreement and also by the licentiates of the Company the taxes are due every time as soon as the Messrs. Siemens and Halske or the licentiates of the German Edison Company have paid to the latter one the amounts due therefore. The German Edison Company shall furnish to the Compagnie Continentale Edison of Paris every month a list of the machines sold in Germany, for the production of the current for the purpose of illumination by incandescent light, by herself, her licentiates or by the firm: Siemens and Halske and she shall give the necessary details. She shall also furnish a list of the incandescent lamps disposed of outside of the German Empire, by herself or her licentiates and she shall give the illuminating power of these lamps. For every horse power expended in Electric light, as far as, according to b a tax is to be paid on it and for every lamp, this tax has only to be paid once.

Section 44.

The German Edison Company is held to pay the taxes, for the patents mentioned in paragraph 3 (wording of the present addition) paragr. 35-a and paragraph 36, always at the right time and before due at the proper treasury, and to send the vouchers therefore at least a month before the expiration of the last term to the Compagnie Continentale Edison.

The German Edison Company has the right to give up all or separate ones of these patents, but not before she made her intention in that respect known at least three months ahead to the Compagnie Continentale Edison, to enable her to see at her own expense to the protection of the said patents. If the Compagnie Continentale Edison makes use of this right she becomes the owner of the patents given up by the German Edison Company which patents may, if required, have to be transferred back to the former Company, which retransfer would not interfere with the claim of the Compagnie Continentale Edison on the advantages and taxes coming to her on the ground of the existing agreements.

II. To authorize the superintending board to order, in common with the president of the company, those formal modifications of the resolutions in article 1 which shall be found necessary and to order the entering of the modifications of the Statutes agreed upon into the register of the company.

(1883)

THOMAS A. EDISON,
No. 65 FIFTH AVENUE.

NEW YORK 188

F.O.B. Amsterdam -

Dynamo Machines.

		Dollars
25	light. 16 candle .75 ampere per Lamp.	175
50	" " " "	250
75	"	310
100		380
150		510
200		675
250		800
300		950
400		1250
500		1550

All these machines give 125 Volts. so Lamps of any lower volts can be used —
All have the same Belt speed —

36
153

(1883)

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme. Capital : 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ELECTRICITÉ
Grand Diplôme d'honneur
PARIS 1881

Ivry-sur-Seine, le
5, RUE DU PARC.

Mr. A. Edison Esq.

New York.

Send copy of this letter to Sawyer & Man for Edison to answer

write this to Sahlein

write this to Sims –

My dear Edison,

A hint for the Machine works.

Hennis tells me that the C Dynamos all came to Milan without having the bearing places of the shaft tallowed – He says they were lapped with paper and then outside of this there was some tallow, but not inside – The sea air so rusted them that he says it took him over two months to get them to run without heating – He says that with any more they ought to tallow them well and afterwards wrap them with a piece of felt that has been dipped into melted tallow. Another thing; he says that the Armington engines came not entirely together and there were no marks to tell which piece belonged to which engine – Perhaps you will notify them of this.

Armington Engines. I am very much disappointed about these people – Armington never comes near us and repeated letters and telegrams cannot bring him here although he knew I wanted to make tests for some people before Cunningham left – There were many things wrong in the drawings sent which we have had to get

(1883)

SOCIÉTÉ INDUSTRIELLE ET COMMERCIALE EDISON

Société Anonyme, Capital : 1.500.000 Francs

EXPOSITION INTERNATIONALE D'ELECTRICITÉ

Grand Diplôme d'honneur PARIS 1881

2

Ivry-sur-Seine, le

5, RUE DU PARC.

over as best we could — Have you a good man that you could send me if I want him; a Frenchman if possible who is fit to take the overseeing (a sort of leading workman) of the engine and Dynamo building — My director is confident that he can get along but I should be more confident if we had a man that had helped to make them there; I shall not want a $3000 a year man but a good workman who has worked in the machine works. I could use Henri but he is too valuable a man for me outside? Let me know by letter —

Wrinkle on Dynamos. Under the commutator bars we have always put japanned paper instead of mica in the small sizes of dynamos — I find that in many cases this paper is carbonized & sometimes even we have noticed nothing wrong with the machine particularly — I put mica in them now. — Perhaps you do the same —

Yours truly

Chas Batchelor

Send this item to Soldan

Copy to Mr Eaton for definite text

(1883)

Leipziger Strasse 96.
Berlin.

find out about Riedt.

Dear Mr Edison.

I wrote a hasty note to you some weeks ago, relating particularly to meters and a man for the Meter department. Very shortly afterwards, we received an application from a Mr Riedt who represented that he had just come from New York, where he had been in charge of the Meter department. His services were secured, which was very fortunate, if his experience is as represented, which we have yet to find out.

We have telegraphed to Bergman & Co. through you to ship us a number of Meters and some extra Hundred-light Shunts. In the first large order for material which we sent, we mentioned six of each size

complete, but we only received six altogether. In my last letter, I wrote you to please forward the balance, and also several extra of larger size and numbers stated. When we telegraphed you a few days ago, to know when the meters had left, you answered: You had no order, which was strange, considering my letter, which you must have received by that time. This has somewhat delayed us; but we trust the order sent Bergmann by Cable will be dispatched immediately. We shall test our Central Station for the two clubs here, within a week, and we desire to fit them both with our meters as soon as possible, and also our own building in which there is a Café &c. We are now putting in an installation near us in which three parties receive the light, two of them being charged by meter by the third party, who has undertaken the expense of fitting up the installation. We have just fitted two Cafés with Electric-light, the power being supplied by Otto gas-machines, the latter are of the double-Cylinder type, 8 horse power, and by means of a governor on the counter-shaft, which was designed by Mr Rathenau, we secure perfect steadiness and regularity in the light. In London, we made tests with both the Otto and Thompson & Stern gas-machines, but even with the Fly-wheel on the armature, we did not secure regularity in the light. I think the regulator spoken of, is a big thing, and will give us very much business in Berlin, which we could not handle, except from central station.

Cable has allowed to try patent to Co

Machines. We have received the two types of H and T machines, and after a test of both, have given Siemans and Halske an order for a number of each of these forms. The delay in the receipt of these has inconvenienced us, and it is a matter of surprise to us, that they have been sent, without a drawing or pattern

of any kind coming with them. The consequence has been that, Siemens and Halske have had to take them to pieces down to the last bolt and washer. The T machine we tested with 100 lights and it gave very satisfactory results. The H. Machine, based upon what we heard from you and Mr Batchelor, was tested by us with 500 lights, as we desired to prove its maximum capacity and make an arrangement relative to use of same with Siemens and Halske. After running for four or five hours, we found the armature very hot, although really, not hotter than I have seen machines before which were slightly overloaded. On examination, we found, the centrifugal force had been so great, that at the speed of 1000 to 1050 revolutions, the wire of the armature twisted bodily in the direction of rotation. Upon taking the armature out, we found that of the little Fiber-teeth, put in to separate the wires, three rows of these little

The machine was tested for 400 and for 500 C.P. lamps. Mr Batchelor came in the morning and made some motion

2

Fiber-teeth had been torn off and twisted, the Brass-wire bands not being sufficient to retain them in place. We found also at the pully end of the armature opposite, had been, in the under layers, carbonized. It was not thought that the wires were of sufficient sectional area for 500 lights, and the finding of the wires carbonized underneath, was a surprise, as up to the end of the test, the machine gave no evidence whatever of the trouble beneath. I believe the machine had been heavily loaded in America, and when we received the insulation was already partially carbonized. Upon this theory, we have had the armature entirely rewound, and have put in larger and stronger Fiber-plugs, and have made the Brass-bands greater in number, each a little broader, and soldered all the way round. The machine is now almost ready for a new test, and we shall try it, and determine its maximum commercial capacity. Had we received full

(1883)

particulars and plans of the two machines sent, it would have saved a very great deal of inconvenience and delay. The delay in sending the models of smaller types of machines, has also put us back considerable, as we cannot secure them from Paris, on account of our arrangement with Siemans and Halske, and this Firm has been quite anxious that we should make use of their machines. Please see that full particulars, plans &c are sent, of all machines heretofore sent, or yet to be sent. Please also inform us if H. Machine had not been subjected to severe test in America before being sent here, and what was the maximum number of lamps it was tested with. Please inform us what you are making in the way of Motors and whether you are applying them in your Central Station in New York, and what powers.

Lamps. We are now arranging for the establishment of a large Lamp-factory here. And in connection with the subject of lamps, I will say, — as I said in a recent letter to Mr Upton, — that you people in America do not understand the lamp question here in Germany. Were it not for several reasons we should buy every lamp from you or the French Co., but the objections are these. First, the German Patent Law demands that at least the greater portion of a Patented article, should be manufactured in the country. Secondly, the sentiment in Germany is perhaps stronger than in any other country on the subject of employing native labour in such manufactures. Thirdly, Siemans and Halske have at present a small Lamp-factory; and perhaps in a few years, when our agreement with them terminates, they will be in the possession of a large and well organized factory, while our Company would be dependant on other countries. This important consideration, and possibly the consideration of ultimate profit, have caused us to decide upon going to the trouble and expense of putting

45 pct of our people are German

up a factory". I agree with Mr Batchelor who, in a recent letter says: that it would be very advisable to secure some of the Apparatus from America, such, for instance, as Mercurial pump; But of these matters you will have heard somewhat already, and will soon hear considerably more.

We have sent an order for 30,000 lamps, the first installment of which arrived in our store-house yesterday, Nov 8/83. We trust great care will be taken in the packing of the different Volts separate, as this has given us considerable trouble with the French lamps. Is it not possible to manufacture a 10 candle lamp at a lower figure? as it is a better unit of light, and is much less troublesome than the B lamp, whose greater virtue lies in its economy, although the short carbons look very pretty when grouped in large chandeliers. We are glad to hear through Mr Upton's letter of the success of the Town plant and three wire system, and we should

(1883)

be very pleased if you would send us any information relative to this class of work, with estimates which you have made of costs in putting up &c. I stated in a letter some time ago, that the Company will be pleased to accept any expenses incurred in the preparation of copies, estimates, or other work of this kind. I saw in a paper recently, that you were now engaged in fitting up the second portion of the down town Central Station, and that you intended arranging with the three wire system. Does this relate only to the new portion of the work, or shall you practically reorganize the district which is already laid down? Mr Rathenau requests me to say that we have so been harassed by delay in receipt of models & because of constant changes being made in the types that our Competitors Siemens & Halske & Sheckert are doing the business we should be doing and he adds further that-

no -

We are now forced to look to Dr Hopkinson who is making slow speed and compound machines &c &c.

Mr Rathenau also makes me to say we are still negotiating with the authorities about concessions in Berlin for laying mains underground and with very satisfactory results. We have just finished the lighting of his handsome Cafe's in Berlin & have today received an order for a third (all with gas engines) in a few weeks we shall have quite a number of installations in operation here and I will try at an early date to send you a synopsis of installations already completed by us in the German Empire & will try & send Major Eaton some details also soon.

With very sincere regards

Yours truly.

W. J. Hammer

Explain to Hammer how we do our big so as not to get stuck on machines — The H machine was tested with heavy load — also understand that the machines are tested with 400 amperes of course if you put on 500 lamps of .92 amperes it would burn the machine & have been tested with .75 amperes lamps. our later H machines are wound with larger wires & few large wires instead of many small wires

(1883)

SOCIÉTÉ ÉLECTRIQUE EDISON

Société anonyme au Capital de UN MILLION de Francs

PARIS. — 33, Avenue de l'Opéra. — PARIS

ÉCLAIRAGE

DE

VILLES, RUES, ÉDIFICES PUBLICS ET PARTICULIERS

Châteaux, Magasins.

THÉATRES, USINES, MUSÉES, HOPITAUX, BATEAUX A VAPEUR, CAFÉS, ETC.

CONSEIL D'ADMINISTRATION

M. Charles PORGÈS, président.
M. Élie LÉON, vice-président.
M. J.-F. BAILEY, administrateur-délégué.
M. Louis RAU, »

MM. Charles BATCHELOR, administrateur.
Alfred CHATARD, »
Georges LEBEY, »
Henri de PARVILLE, »
Le Vicomte SÉRURIER, »

NOTE SUR L'ÉCLAIRAGE PAR LA LUMIÈRE EDISON

Qualités de la Lumière.

La lumière Edison est déjà employée en Amérique et en Europe dans un grand nombre d'établissements industriels, usines, magasins, banques, journaux, gares de chemins de fer, cafés, salles de spectacle, salles de concert, etc. A New-York, les maisons de tout un vaste quartier sont éclairées jour et nuit par 15,000 lampes à la satisfaction générale; ce n'est que le commencement d'une exploitation régulière qui s'étendra à un périmètre considérable. En Angleterre, en Allemagne, en Russie, en Autriche, en Belgique, en Italie, l'éclairage électrique prend chaque jour une nouvelle extension; il se forme des Compagnies puissantes pour l'exploitation du système Edison.

La nouvelle lumière est en effet destinée à se substituer de plus en plus aux anciens procédés d'éclairage, au gaz, à l'huile, au pétrole, dans les usines, fabriques, manufactures, ateliers, imprimeries, magasins, salles de réunions, etc., dans les châteaux, villas, hôtels, maisons particulières, dans les petites villes, les bourgs, les gros villages, partout, en un mot, où l'on peut disposer, sur place ou à proximité, de la force motrice convenable.

L'avantage sur tous les autres systèmes d'éclairage est évident. La lumière Edison est fixe et ne vacille pas au moindre courant d'air; elle est d'un ton doré agréable et d'un éclat doux qui ne fatigue pas la vue; elle n'élève pas la température de façon à rendre, pendant l'été, certains locaux inhabitables; elle ne vicie pas l'atmosphère, ne dégage ni fumée ni gaz sulfurés détruisant les peintures et les tentures des appartements; elle est indépendante des variations atmosphériques et ne perd pas en pouvoir éclairant avec l'altitude.

Produite en vase clos, brûlant dans l'eau comme dans l'air, au milieu de la ouate, de la paille et des matières les plus inflammables, elle ne laisse pas, comme le gaz, sous la menace perpétuelle de l'incendie, de l'explosion ou de l'asphyxie. On peut affirmer que c'est la lumière qui offre à la fois la sécurité la plus absolue et les conditions hygiéniques les meilleures; elle est sans rivale sous ce double rapport et ne peut être comparée à aucun autre mode d'éclairage.

La lumière Edison présente également des avantages incontestables sur la lumière électrique par arc; elle ne répand pas autour d'elle ces teintes blafardes et violacées propres à l'arc voltaïque; elle ne scintille pas et ne varie pas continuellement dans son éclat; elle ne laisse pas tomber sur les par-

quets des parcelles de charbons enflammés; elle brûle silencieusement, sans qu'on ait à s'en occuper pendant de longs mois, tandis que chaque jour il faut remettre des baguettes de charbon dans les lampes à arc; elle ne nécessite aucun mécanisme susceptible de dérangement comme ceux des régulateurs à arc. Enfin sa divisibilité poussée à la limite lui permet de remplacer non seulement les plus petits becs de gaz, mais les lampes à huile, les bougies, etc., ce qu'il est absolument impossible d'obtenir avec les régulateurs, puisque le plus petit foyer par arc a encore un pouvoir éclairant d'au moins 30 à 40 becs Carcel.

Il est vrai qu'en apparence au moins l'unité de lumière coûte plus cher dans le système par incandescence, mais comme la lumière peut être beaucoup mieux répartie et distribuée, puisqu'on la divise autant qu'on veut, l'*éclairage*, qu'il ne faut pas confondre avec la *lumière*, revient, en définitive, à un prix moins élevé.

Prix de Revient.

L'éclairage au gaz étant le plus répandu et le plus économique, c'est avec le gaz qu'il est surtout intéressant de comparer la lumière Edison. On va voir que l'éclairage Edison permet de réaliser encore des économies sur l'éclairage au gaz.

Le gaz coûte généralement en France 0 fr. 30 le mètre cube; la consommation *théorique* est de 105 litres par Carcel et par heure; ce qui correspond à une dépense par Carcel et par heure de 0 fr., 0315.

En fait, cette dépense est assez notablement augmentée; elle atteint quatre centimes et quelquefois un peu davantage, soit par suite de l'emploi de becs autres que le type normal à double courant d'air, soit par un défaut de qualité du gaz ou de réglage des robinets et de la pression, soit parce qu'il faut augmenter le débit quand on s'élève à des altitudes de plus en plus grandes.

Le prix de la lumière Edison varie de son côté selon les conditions d'établissement de la force motrice. Dans les usines déjà pourvues de machines à vapeur, où il est facile d'emprunter de la force au moteur, sans installations supplémentaires, le prix est naturellement réduit; il varie dans les limites suivantes:

De 17 lampes à 150 lampes *A* fournissant chacune une lumière équivalente à 1 Carcel, 72, de 2 centimes 34 à 1 centime 74, par lampe et par heure.

De 150 à 500 lampes *A* de 1 centime 74 à 1 centime 50, par lampe et par heure.

Ces prix correspondent par Carcel et par heure à 1 centime 36; 1 centime 01; 0 centime 85.

On n'a pas compris dans ces chiffres l'amortissement du matériel électrique.

Avec l'amortissement, ils s'élèveraient respectivement à 3 centimes 53 ; 2 centimes 46 ; 1 centime 90 par lampe *A* et par heure.

Soit par Carcel et par heure à 2 centimes 05 ; 1 centime 42 ; 1 centime 10.

Ces prix sont inférieurs à ceux du gaz.

Si l'Établissement à éclairer ne possède pas de moteur et qu'il faille nécessairement fournir la force, l'amortissement de ce nouveau matériel grèvera les prix d'une charge supplémentaire. Ces prix pourront monter dans ce cas aux chiffres suivants :

5 centimes	5	pour une installation de	150	lampes *A*.
3 —	62	— —	500	—

Ce qui ne correspond encore respectivement qu'à 3 centimes 19, 2 centimes 10, par Carcel et par heure.

Prix du Matériel Électrique.

Le prix du matériel électrique dans les diverses installations peut se chiffrer approximativement comme il suit :

17 Lampes *A*.	. . . . .	1,940 francs.
60 —	. . . . .	5,650 —
150 —	. . . . .	10,750 —
250 —	. . . . .	15,450 —
500 —	. . . . .	30,900 —

Ces prix ne comprennent pas, bien entendu, l'appareillage variable à l'infini.

Le prix des lampes n'y figure pas non plus, par cette raison que leur usure entre dans l'estimation du coût horaire de la lumière.

On peut toujours remplacer à volonté une lampe *A*, de 1 Carcel 72, par deux lampes *B* de 0 Carcel 86. Mais il en résulte un supplément de dépense d'installation d'environ 12 fr. 50 par nouvelle lampe ajoutée.

Force Motrice.

On peut admettre que dans toutes les installations 1 cheval vapeur transmis à la machine dynamo-électrique actionne 8 lampes *A* de 16 bougies ou 16 lampes *B* de 8 bougies.

Adresser les demandes de renseignements et de devis à la SOCIÉTÉ ÉLECTRIQUE EDISON, 33, Avenue de l'Opéra, Paris.

000. — PARIS. — IMPRIMERIE CHARLES BLOT, RUE BLEUE, 7.

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FRENCH NEWS.

[TELEGRAM FROM OUR CORRESPONDENT.]

PARIS, WEDNESDAY EVENING.

The Galliffet question now appears to be definitively settled. It turns out to be perfectly true that on March 28 General Thibaudin gave his sanction to an order cancelling the circular of the 13th of the same month, in which it was set forth that cavalry manœuvres, on a large scale would be held along the Eastern frontier, between Epinal and Montmedy, under the direction of General de Galliffet. The order was even sent to the *Journal Officiel* for insertion, and would have been duly published but for the action of M. Waldeck-Rousseau, Minister of the Interior. M. Waldeck-Rousseau—objecting to his colleague's sudden determination to modify, at his own initiative, instructions that had been formally approved by the Ministry—refused point blank to permit the insertion of the order in the official paper. At the Cabinet Council held yesterday at the Elysée, under M. Jules Grévy's presidency, General Thibaudin was asked to give a full explanation; and after rather a heated discussion, and further consideration this morning, it was finally decided that the order of March 28 should be suppressed, and the original document, the circular of the 13th, maintained. One modification was, however, introduced into the programme. The manœuvres are not to come off on the eastern frontier, but in another part of the country, to be selected at a later date. Meanwhile, a decree appears this morning in the *Journal Officiel* setting forth that General de Galliffet was yesterday appointed Inspector-General of the Saumur Cavalry School. In spite of the compromise that has been effected, General de Galliffet has certainly had the best of the encounter.

M. Simon Philippart, whose financial undertakings created so great a stir in Paris some four years ago, has it appears got into difficulties in Belgium, as he was arrested yesterday morning on a warrant received from Brussels by the French authorities. The arrest was effected at the offices of an electricity company in the Avenue de l'Opéra, and M. Philippart, after being interrogated by the Commissaire de Police, was lodged in gaol pending the decision of the Government on the demand for his extradition.

For some days the main streets of Paris have been infested with itinerant vendors of imitation 1,000f notes, so closely copied in the outline from those of the Bank of France as to prove dangerous instruments in the hands of un-

THE FUNERAL OF MR. JOHN BROWN.

The remains of Mr. John Brown arrived at Aberdeen from Windsor Castle at 11.40 yesterday morning in charge of Dr. Profeit, Queen's Commissioner, and four brothers of the deceased, Donald, William, Hugh, and Archibald, who were accompanied by a representative from each department of the Royal Household, including Mr. Tait, of Shaw Farm, the Royal bailiff; Mr. Overton, head keeper of Windsor Great Park; Mr. Newel, page of the backstairs; Mr. Power, sergeant-footman; Mr. Thomson, gentleman-porter; and Mr. Hutchinson, from the Royal stables. The carriage containing the body was shunted to the Deeside line, and the party left for Ballater at 12.20, arriving there at 2.15. A large crowd had assembled to witness the transference of the coffin from the railway van to the hearse, which was no sooner accomplished, than the party, who were here joined by the eldest brother of the deceased, started for Balmoral, nine miles off, arriving at the brother's residence about four o'clock. The coffin was conveyed from the hearse to the dining-room, many beautiful wreaths being laid upon it. The body will be interred in the churchyard at Crathie to-day. The Queen has sent several wreaths to be laid on the coffin.

The Court circular issued yesterday contained the subjoined:—

"The removal of the remains of Mr. John Brown (the faithful personal attendant to the Queen) from Windsor Castle to the South-Western Railway Station, *en route* for Crathie, took place yesterday (Tuesday) afternoon, at half-past four o'clock. The service was read at the visitors' entrance by the Rev. T. Orr, after which the coffin, covered with wreaths from the Queen, the Royal family, the Empress Eugénie, and many others, was conveyed in a hearse through the streets of Windsor, where a large number of the inhabitants had assembled to show their respect. The procession was formed by the five brothers of the deceased, Dr. Profeit, the Queen's Commissioner in Scotland, the Gentlemen in Waiting, the servants of the Royal Household, Mews, and Royal Gardens, the Mayor of Windsor, and several members of the Corporation, the Queen's tradesmen, and private friends of the deceased. Mr. Andrew Cockerell was present on behalf of the Prince of Wales. In the morning the Queen and Princess Beatrice, with the Dowager Marchioness of Ely, the Hon. Horatia Stopford, and some of her Majesty's attendants, as well as Mr. John Brown's brothers, were present at a short service held at the entrance of the room of the deceased. The Rev. T. Orr performed the service."

THE FENIAN PLOTS.

The statement that the Dean of Peterborough had received a letter threatening to blow up the Cathedral is contradicted. The communication received contained these words: "Sir,—Take care, or we will blow up your house. The dynamite is ready." It was posted [illegible] village, and is regarded by the

A Note on the Sources

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END

67

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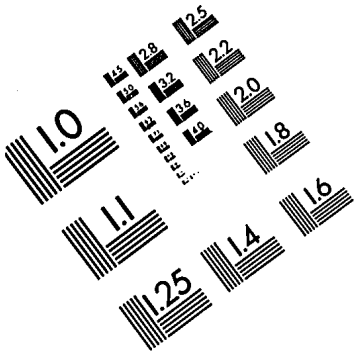

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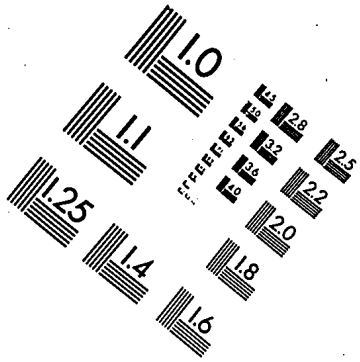

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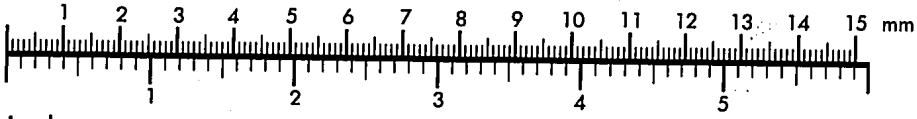

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